

Cable Assembly Adapter

Product Manual



High Reliable & Performance Multi-pin
Connector Harness Assemblies



Low Loss Phase Stability
Cable Assemblies



Test Cable Assemblies
for Vector Network Analyzer



T26 Series
High Reliable & Durable Test Cable



High Precision
Delay Line



Superbend® Microwave & Millimeter Wave
Cable Assemblies



Hand-Flex. Cable Assemblies



Semi-Rigid Cable Assemblies



High Precision Coaxial Adapters

About Us

SRFS Teleinfra is a leading provider of high-quality telecommunication infrastructure solutions. Our company offers a wide range of products and services for the telecommunication industry, including GSM Antennas, RF Antenna & 5G Components, GPS Antennas, IBS/BTS solutions, and RF Cables. Our main products including Millimeter Wave Connector (1.0mm, 1.85mm, 2.4mm, 2.92mm, 3.5mm); RF Coaxial Connectors (N, SMA, SSMA, RP5MA, SMP(GPO), SMM, BMA, SBMA, TNC, TnCA, RPTNC, BNC, MiniBNC, FME, MCX, MMXC, SHV, MVH, TRB, SAA(1.0/2.3), UHF, SMB, SSMB, L29(7/16), 4.3-10, 4.1-9, 5, L9(1.5/5.6), SMC, SMZ(Type343, C, SC, C2, HN etc), RF Coaxial Adapters, Coaxial Terminations, RF Cable Assemblies, Lightning Arrestor, Fixed Coaxial Attenuator, and so on.

We offer an extensive range of interconnect solutions for Applications in Telecom, Aviation, Navigation, 5G and Radar Detection industries.

With so many years of experience and continuous improvement, we have gained very good reputation from our customers in different markets. Our company covers more than 3000+ square meters, with a full set of original production facilities, equipment and testing instruments.



Main categories include:

- Coaxial Fixed Attenuator/Termination (DC-4GHz through 67GHz, 2W-2kW)
- DC Block (9kHz up to 67GHz)
- mmWave Coax Adapter/Connector(Up to 110GHz)
- Low PIM Component (170dBc termination/attenuator/cable/adapter)
- Waveguide Product (adapter/attenuator/termination/coupler)
- Power Divider
- Flexible Cable Assembly (Up to 110GHz)

Advantage

Advantage



- Low loss flexible & low loss semi-rigid cable assembly manufacturing technologies
- Three-dimensional bending technologies for semi-rigid cable
- Bending & soldering technologies for semi-rigid delay line
- Precision phase matching technology
- IPC J-STD-001 trainer certification
- Integrated multi-pin cable assemblies up to DC~50GHz

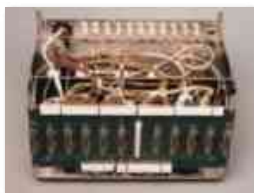
- Provide suitable cable assemblies according to client s applications
- Meet client s requirements of various connector design
- Leading technology of cable assembly phase matching & tracking
- Meet various requirements of three dimensional bending phase match & tracking for semi-rigid cable
- Helpful to solve various problems in system design by high performance products
- Provide generic cabling design of semi-rigid cable & on-site cable assembly phase matching
- Fast & efficient product delivery of sample and bulk orders

Advantage 2



Application

- Civil Communication
- RF/Microwave/Millimeter Wave Instrumentation
- Test & Measurement Equipment and Systems
- Aerospace
- Military Industry
- Medical



Product Series

- Flexible Cable Assemblies
- Hand-Flex / Semi-rigid Cable Assemblies
- Test Cable Assemblies
- Multi-pin Connector Assemblies
- Precision RF/Microwave/Millimeter Wave Coaxial Connector & Adapter
- MiGbit® High Speed Cable & Cable Assemblies
- Wide Band Passive Components(up to 67GHz)
- Test Solutions
- Broadband High Power Amplifier



★ General Cable Assembly Information

Microwave/RF coaxial cable assembly is done by installing the connectors on a RF coaxial cable via special technology, which is served as a transmission line. Specific requirements must be carefully considered for the proper selection of cable assemblies, including, but not limited to the cable and connector constructions, materials, frequency range, VSWR, insertion loss, mechanical requirements, and any environmental or application restrictions. The design engineering should carefully and precisely evaluate electrical, mechanical and environmental factors in order to optimize the solution for a specific application.

★ General Characteristics of Cable Assembly

Impedance(Z₀)

Characteristic impedance is generally implied when speaking of the impedance of a cable, connector, or cable assembly. Maximum power transfer and minimum signal reflection occurs when the characteristic impedance of a cable assembly matches that of the other components in the system. If the impedances all match, losses are due only to the attenuation of the transmission line; otherwise there will be additional reflection losses. The characteristic impedance (Z₀) is directly related to the ratio of the ratio of the inner and outer conductor diameters, and inversely related to the dielectric constant of the core material (ε). Due to the “skin effect” of RF energy transfer, the important dimensions are the outer diameter of the center conductor, d, and the inner diameter of the outer conductor, D.

$$Z_0 = \frac{60}{\sqrt{\epsilon}} \cdot \ln \frac{D}{d} \text{ (}\Omega\text{)} \quad \text{or} \quad Z_0 = \frac{138}{\sqrt{\epsilon r}} \cdot \lg \frac{D}{d}$$

VSWR

Reflections back toward the input end of a cable assembly are caused by variations in impedance along the length of a cable assembly and can cause energy loss by interaction with incident wave.

Voltage Standing Wave Ratio is the ratio of the maximum to the minimum voltage of a standing wave (which is the instantaneous sum of incident and reflected waves).

Then the VSWR is defined by the following formula:

$$1) \text{ Reflection Coefficient } r : \quad = \frac{Z-Z_0}{Z+Z_0} \quad \text{or} \quad = \frac{VSWR-1}{VSWR+1}$$

$$2) \text{ VSWR : } \quad VSWR = \frac{1+|r|}{1-|r|} \quad \text{or} \quad VSWR = \frac{10^{\frac{\alpha}{20}}+1}{10^{\frac{\alpha}{20}}-1}$$

Introduction to RF Cable Assemblies

Return Loss

Return loss is the ratio (expressed in dB) of the power of the original signal vs. the power of the reflected signal. Thus, return loss indicates the relative size of the reflected signal and, therefore, how perfectly or imperfectly the transmission line is terminated. The equivalent parameter is either the reflection coefficient or VSWR. Return loss can be calculated by reflection coefficient:

$$RL: RL = -20 \log \frac{1}{\Gamma} \quad \text{or} \quad RL = -20 \log \left(\frac{VSWR+1}{VSWR-1} \right)$$

Attenuation (Insertion Loss)

The total insertion loss of cable assembly is comprised of the loss of connectors, cable and mismatch loss.

Velocity of Propagation

Velocity of propagation is the speed of the transmitted signal as compared to the speed of light and is inversely proportional to the square root of the dielectric constant. Material with a lower dielectric constant will yield a higher velocity of propagation.

$$V_p = \frac{1}{\sqrt{\epsilon}} \times 100\%$$

Delay Time

Delay time is the duration of time that a signal takes from entrance to exit in a coaxial line. The delay time is independent of the frequency and is a function of the dielectric constant and physical length of the transmission

line, usually expressed in nanoseconds (10^{-9} seconds) per foot.

$$T_d = \frac{L}{C} = \frac{L}{\sqrt{\epsilon}} = \frac{L}{V_p \times C}$$

Phase

Applications such as antenna may require cable assemblies to have intended velocity of propagation and transmission time, and this is determined by a specific electrical length of cable assembly instead of physical length. Phase is used calculate the electrical length.

$$\Phi = \frac{1}{300 \times V_p} \times f \times 360^\circ \quad (\text{Frequency in GHz})$$

Phase Matching

Phase matching denotes two or more cable assemblies with the same phase length, or electrical length. Phase matching can be absolute, as compared to a predetermined value, or relative, where the assemblies are matched to each other.

Phase Stability over Flexure

Phase stability over flexure is the phase shift by bending the cable, it can be significantly affected by the bending method and bend radius, which should be taken into account when the degree of change is a concern.

Phase Stability over Temperature

The electrical length for a given frequency will "shift" as a result of environmental changes. The degree of change is based on mechanical stresses, connector torque and thermal conditions.

The degree of phase shift as a result of temperature variation can be calculated by using the following formula:

$$PPM = \frac{\Delta\Phi}{\Phi} * 10^6$$

$\Delta\Phi$ — Phase change value in degree
 Φ — Electrical length of cable assembly in degree
 PPM — Phase changed part per million

Phase Tracking

Phase tracking is the ability of multiple cable assemblies to closely reproduce their phase characteristics relative to each other over a range of temperature, flexure, or both. Phase tracking is essentially a measure of the assemblies' mechanical consistency. Thermal conditioning of coaxial cable may improve tracking characteristics.

Introduction to RF Cable Assemblies

Average Power Handling

The cable attenuation generates heat between the center and outer conductor. Power handling capability is reflected in cable capability of withstanding the heat. Power handling is affected by two main factors, one is cable max operation temperature, and another is cable attenuation. Power handling will be higher with better cable attenuation and smaller heat. Under the same conditions, power handling will be higher with higher operation temperature the cable can withstand.

Average power handling is greatly affected by altitude, temperature and VSWR. Average power handling reduces by increase of altitude, temperature and VSWR. Their respective impacts on power handling can be checked by Table 1, Table 2 and Table 3.

Table 1

Reduction Coefficient of Power Handling Influenced by Altitude

| Altitude | | Average Power Handling Reduction Coefficient | Peak Power Handling Reduction Coefficient |
|----------|--------|--|---|
| Inch | Meter | | |
| 0 | 0 | 1 | 1 |
| 10,000 | 3,048 | 0.90 | 0.50 |
| 20,000 | 6,096 | 0.79 | 0.20 |
| 30,000 | 9,144 | 0.68 | 0.14 |
| 40,000 | 12,192 | 0.58 | 0.10 |
| 50,000 | 15,240 | 0.48 | 0.08 |
| 60,000 | 18,288 | 0.38 | 0.06 |
| 70,000 | 21,336 | 0.29 | 0.05 |

Table 2

Reduction Coefficient of Power Handling Influenced by Temp.

| Temperature | Power Handling Reduction Coefficient |
|-------------|--------------------------------------|
| °C | |
| 25 | 1 |
| 50 | 0.83 |
| 85 | 0.66 |
| 100 | 0.58 |
| 125 | 0.43 |
| 150 | 0.28 |
| 200 | 0.15 |

Table 3

Reduction Coefficient of Power Handling Influenced by VSWR

| VSWR (:1) | Power Handling Coefficient | VSWR (:1) | Power Handling Coefficient |
|-----------|----------------------------|-----------|----------------------------|
| 1.00 | 1.0000 | 1.55 | 0.6766 |
| 1.05 | 0.9529 | 1.60 | 0.6602 |
| 1.10 | 0.9112 | 1.65 | 0.6449 |
| 1.15 | 0.8738 | 1.70 | 0.6306 |
| 1.20 | 0.8403 | 1.75 | 0.6173 |
| 1.25 | 0.8100 | 1.80 | 0.6049 |
| 1.30 | 0.7825 | 1.85 | 0.5933 |
| 1.35 | 0.7575 | 1.90 | 0.5824 |
| 1.40 | 0.7347 | 1.95 | 0.5722 |
| 1.45 | 0.7137 | 2.00 | 0.5625 |
| 1.50 | 0.6944 | 2.05 | 0.5534 |

Table 4: VSWR, Return Loss, Matching Loss and Matching Efficiency

| VSWR | Return loss (dB) | Reflection | Matching loss (dB) | Matching Efficiency (%) | VSWR | Return loss (dB) | Reflection | Matching loss (dB) | Matching Efficiency (%) |
|------|------------------|------------|--------------------|-------------------------|------|------------------|------------|--------------------|-------------------------|
| 1.01 | 46.06 | 0.0050 | 0.000 | 100.0 | 1.55 | 13.32 | 0.2157 | 0.207 | 95.35 |
| 1.02 | 40.09 | 0.0099 | 0.000 | 99.99 | 1.60 | 12.74 | 0.2308 | 0.238 | 94.67 |
| 1.03 | 36.61 | 0.0148 | 0.001 | 99.98 | 1.65 | 12.21 | 0.2453 | 0.270 | 93.98 |
| 1.04 | 34.15 | 0.0196 | 0.002 | 99.96 | 1.70 | 11.73 | 0.2593 | 0.302 | 93.28 |
| 1.05 | 32.26 | 0.0244 | 0.003 | 99.94 | 1.75 | 11.29 | 0.2727 | 0.336 | 92.56 |
| 1.06 | 30.71 | 0.0291 | 0.004 | 99.92 | 1.80 | 10.88 | 0.2857 | 0.370 | 91.84 |
| 1.07 | 29.42 | 0.0338 | 0.005 | 99.89 | 1.85 | 10.51 | 0.2982 | 0.405 | 91.10 |
| 1.08 | 28.30 | 0.0385 | 0.007 | 99.85 | 1.90 | 10.16 | 0.3103 | 0.440 | 90.37 |
| 1.09 | 27.32 | 0.0431 | 0.008 | 99.81 | 1.95 | 9.84 | 0.3220 | 0.475 | 89.63 |
| 1.10 | 26.44 | 0.0476 | 0.010 | 99.77 | 2.00 | 9.54 | 0.3333 | 0.511 | 88.89 |
| 1.11 | 25.66 | 0.0521 | 0.012 | 99.73 | 2.10 | 9.00 | 0.3548 | 0.584 | 87.41 |
| 1.12 | 24.94 | 0.0566 | 0.014 | 99.68 | 2.20 | 8.52 | 0.3750 | 0.658 | 85.94 |
| 1.13 | 24.29 | 0.0610 | 0.016 | 99.63 | 2.30 | 8.09 | 0.3939 | 0.732 | 84.48 |
| 1.14 | 23.69 | 0.0654 | 0.019 | 99.57 | 2.40 | 7.71 | 0.4118 | 0.807 | 83.04 |
| 1.15 | 23.13 | 0.0698 | 0.021 | 99.51 | 2.50 | 7.36 | 0.4286 | 0.882 | 81.63 |
| 1.16 | 22.61 | 0.0741 | 0.024 | 99.45 | 2.60 | 7.04 | 0.4444 | 0.956 | 80.25 |
| 1.17 | 22.12 | 0.0783 | 0.027 | 99.39 | 2.70 | 6.76 | 0.4595 | 1.030 | 78.89 |
| 1.18 | 21.66 | 0.0826 | 0.030 | 99.32 | 2.80 | 6.49 | 0.4737 | 1.104 | 77.56 |
| 1.19 | 21.23 | 0.0868 | 0.033 | 99.25 | 2.90 | 6.25 | 0.4872 | 1.176 | 76.27 |
| 1.20 | 20.83 | 0.0909 | 0.036 | 99.17 | 3.00 | 6.02 | 0.5000 | 1.249 | 75.00 |
| 1.21 | 20.44 | 0.0950 | 0.039 | 99.10 | 3.10 | 5.81 | 0.5122 | 1.321 | 7377 |
| 1.22 | 20.08 | 0.0991 | 0.043 | 99.02 | 3.20 | 5.62 | 0.5238 | 1.393 | 72.56 |
| 1.23 | 19.73 | 0.1031 | 0.046 | 98.94 | 3.30 | 5.43 | 0.5349 | 1.464 | 71.39 |
| 1.24 | 19.40 | 0.1071 | 0.050 | 98.85 | 3.40 | 5.26 | 0.5455 | 1.534 | 70.25 |
| 1.25 | 19.08 | 0.1111 | 0.054 | 98.77 | 3.50 | 5.11 | 0.5556 | 1.603 | 69.14 |
| 1.26 | 18.78 | 0.1150 | 0.058 | 98.68 | 3.60 | 4.96 | 0.5652 | 1.672 | 68.05 |
| 1.27 | 18.49 | 0.1189 | 0.062 | 98.59 | 3.70 | 4.81 | 0.5745 | 1.739 | 67.00 |
| 1.28 | 18.22 | 0.1228 | 0.066 | 98.49 | 3.80 | 4.68 | 0.5833 | 1.807 | 65.97 |
| 1.29 | 17.95 | 0.1266 | 0.070 | 98.40 | 3.90 | 4.56 | 0.5918 | 1.873 | 64.97 |
| 1.30 | 17.69 | 0.1304 | 0.074 | 98.30 | 4.00 | 4.44 | 0.6000 | 1.938 | 64.00 |
| 1.31 | 17.45 | 0.1342 | 0.079 | 98.20 | 4.10 | 4.32 | 0.6078 | 2.003 | 63.05 |
| 1.32 | 17.21 | 0.1379 | 0.083 | 98.10 | 4.20 | 4.22 | 0.6154 | 2.067 | 62.13 |
| 1.33 | 16.98 | 0.1416 | 0.088 | 97.99 | 4.30 | 4.12 | 0.6226 | 2.130 | 61.23 |
| 1.34 | 16.75 | 0.1453 | 0.093 | 97.89 | 4.40 | 4.02 | 0.6296 | 2.193 | 60.36 |
| 1.35 | 16.54 | 0.1489 | 0.097 | 97.78 | 4.50 | 3.93 | 0.6364 | 2.255 | 59.50 |
| 1.36 | 16.33 | 0.1525 | 0.102 | 97.67 | 4.60 | 3.84 | 0.6429 | 2.316 | 58.67 |
| 1.37 | 16.13 | 0.1561 | 0.107 | 97.56 | 4.70 | 3.75 | 0.6491 | 2.376 | 57.86 |
| 1.38 | 15.94 | 0.1597 | 0.112 | 97.45 | 4.80 | 3.67 | 0.6552 | 2.436 | 57.07 |
| 1.39 | 15.75 | 0.1632 | 0.117 | 97.34 | 4.90 | 3.60 | 0.6610 | 2.494 | 56.31 |
| 1.40 | 15.56 | 0.1667 | 0.122 | 97.22 | 5.00 | 3.52 | 0.6667 | 2.552 | 55.56 |
| 1.41 | 15.38 | 0.1701 | 0.127 | 97.11 | 5.10 | 3.45 | 0.6721 | 2.611 | 54.82 |
| 1.42 | 15.21 | 0.1736 | 0.133 | 96.99 | 5.20 | 3.38 | 0.6774 | 2.667 | 54.11 |
| 1.43 | 15.04 | 0.1770 | 0.138 | 96.87 | 5.30 | 3.32 | 0.6825 | 2.724 | 53.41 |
| 1.44 | 14.88 | 0.1803 | 0.143 | 96.75 | 5.40 | 3.25 | 0.6875 | 2.779 | 52.73 |
| 1.45 | 14.72 | 0.1837 | 0.149 | 96.63 | 5.50 | 3.19 | 0.6923 | 2.834 | 52.07 |
| 1.46 | 14.56 | 0.1870 | 0.155 | 96.50 | 5.60 | 3.14 | 0.6970 | 2.889 | 51.42 |
| 1.47 | 14.41 | 0.1903 | 0.160 | 96.38 | 5.70 | 3.08 | 0.7015 | 2.942 | 50.79 |
| 1.48 | 14.26 | 0.1935 | 0.166 | 96.25 | 5.80 | 3.03 | 0.7059 | 2.996 | 50.17 |
| 1.49 | 14.12 | 0.1968 | 0.171 | 96.13 | 5.90 | 2.97 | 0.7101 | 3.048 | 49.57 |
| 1.50 | 13.98 | 0.2000 | 0.177 | 96.00 | 6.00 | 2.92 | 0.7143 | 3.100 | 48.98 |

Introduction to RF Cable Assemblies

Table 5: Coaxial Connectors Frequency

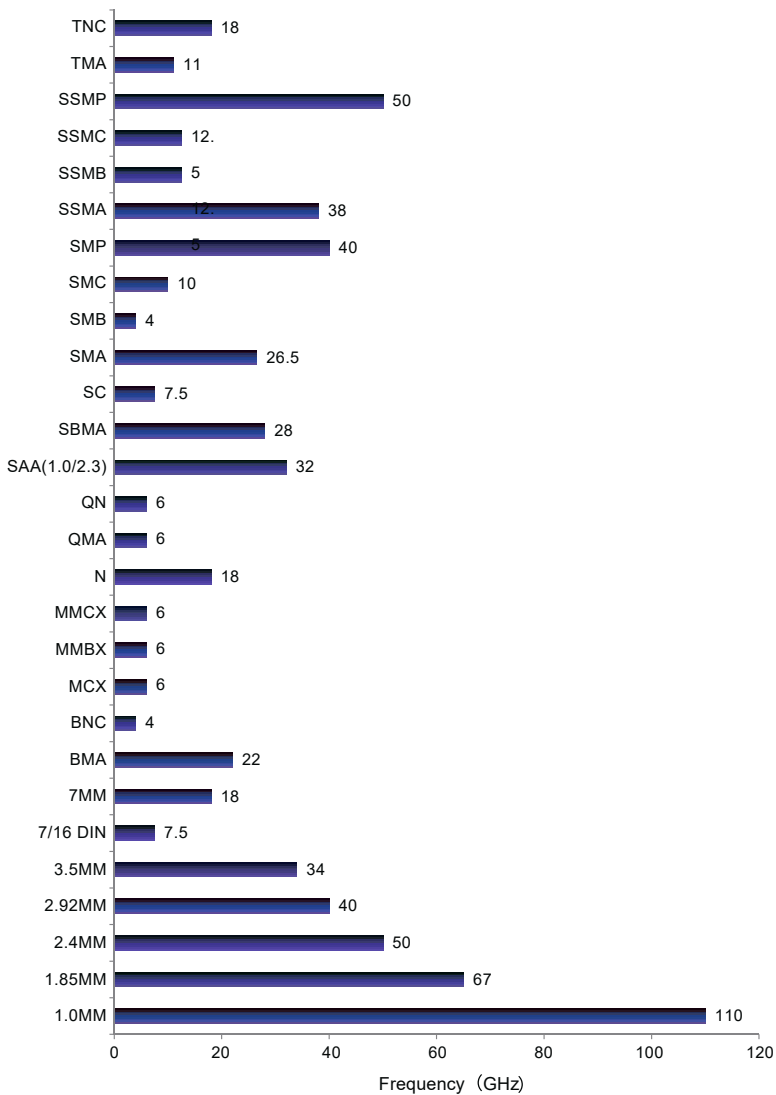
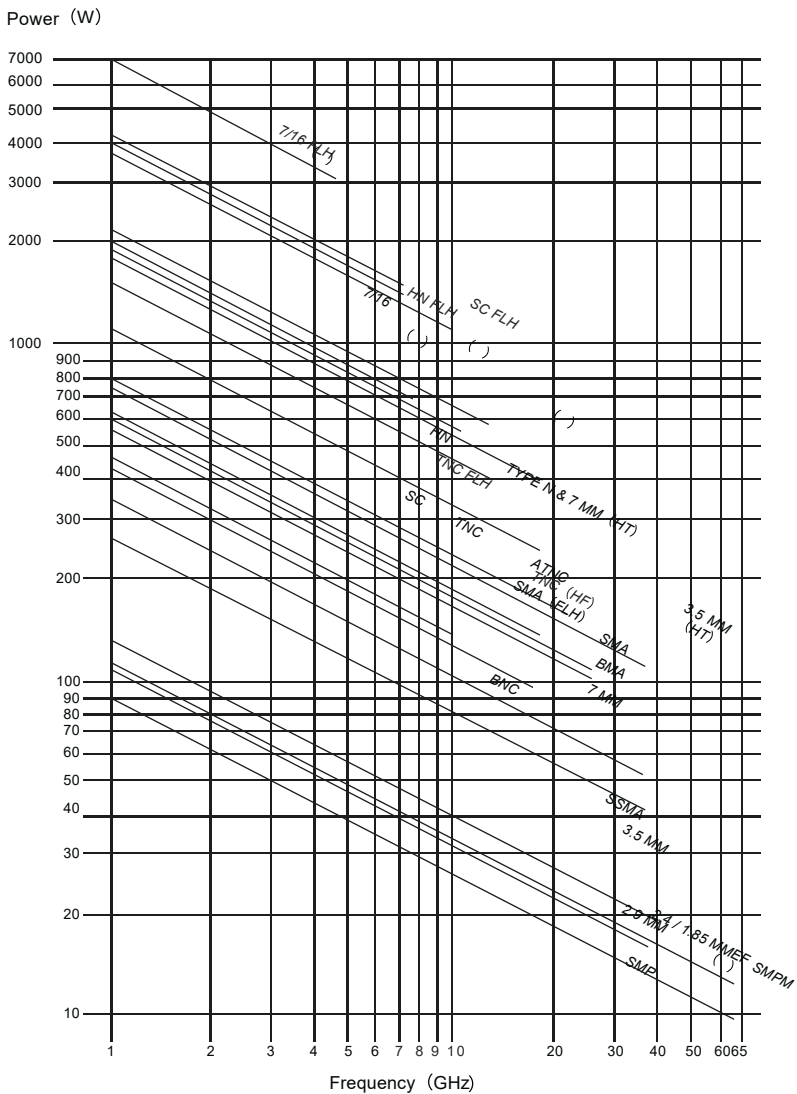


Table 6: Coaxial Connector Average Power Map



Care & Handling Instruction

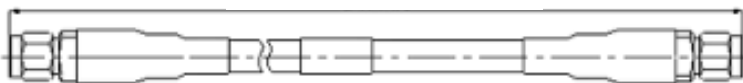
SRFS microwave cable assemblies of all types offer a long service life providing they are treated with the appropriate care and attention. Microwave cable assemblies are high precision system components and require proper handling in order to ensure that measured performance values are maintained.

To achieve the maximum installed performance the following guidelines should be followed.

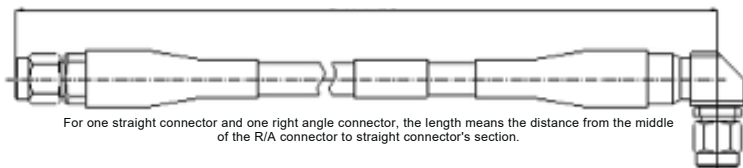
- Assemblies should remain in their original packaging for delivery and storage. Storage temperature should be between 50 °C and +80 °C and the relative humidity should not exceed 85%.
- Carefully unpack assemblies before installation. Avoid kinking cables when straightening from a coil or reel.
- Ensure that the surroundings are clean and free of dust, dirt and any other particles that could enter unsealed connector interfaces.
- Use protective caps to prevent contamination whenever connectors are unmated.
- Where interfaces are contaminated, particles can be removed with dry, oil-free compressed air. Please use eye-protection. Interfaces can be cleaned with dry cotton swabs. Do not use hard hand tools or solvents. Do not blow into interfaces or use normal compressed-air.
- Choose the installation routing using the largest bend radii possible. Small bend radii may affect electrical performance. Exceeding the specified limits during the installation process could cause a permanent degradation.
- Avoid twisting microwave cable assemblies. Torsion of this type of assembly can alter the relative diameters of cable layers and affects the electrical characteristics. Exceeding the limit of 10° per metre during installation process could cause a permanent degradation.
- Assemblies should be fixed in place without excess pressure. The use of cable ties should be avoided where possible, as they can easily exert more force than this. If cable ties must be used then they should be as wide as possible and still allow movement of the cable. Avoid placing fixings at regular intervals.
- Examine interfaces for damage and/or contamination before mating.
- Discharge connectors before mating or ensure that they are connected to a suitable ground.

- When mating connectors with a screwed interface always hold the connector bodies and turn only the coupling nut. This avoids twisting the cable and ensures minimum wear on the connector pins.
- Do not exceed the specified torque.
- Personnel handling testing instruments should always wear a wrist, leg or ankle strap which connected to work bench mat. The work bench mat should be connected via a 1MΩ protective resistor directly to a ground. When the cable assembly is connected to the analyzer or any other ESD sensitive instruments, the inner conductor should always be properly grounded.

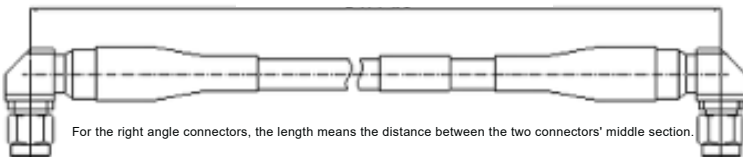
Length of the Assemblies



For the straight connectors, the length means the distance between the two sections of the two connectors.



For one straight connector and one right angle connector, the length means the distance from the middle of the R/A connector to straight connector's section.



For the right angle connectors, the length means the distance between the two connectors' middle section.

Common Connector Codes List

| Connector Type | Code | Frequency (GHz) | Connector Type | Code | Frequency (GHz) |
|----------------|------|-----------------|----------------|------|-----------------|
| 1.0mm M | 1Y | 110 | MCX F | 28 | 12 |
| 1.0mm F | 1Z | 110 | SSMA M | 25 | 38 |
| 1.85mm M | 0P | 67 | SSMA F | 26 | 38 |
| 1.85mm F | 0Y | 67 | SMP M | 36 | 40 |
| 2.4mm M | 39 | 50 | SMP F | 37 | 40 |
| 2.4mm F | 48 | 50 | SMP RA F | 38 | 18 |
| 2.92mm M | 40 | 40 | SSMP F | 24 | 40 |
| 2.92mm F | 46 | 40 | SSMP M | 0B | 40 |
| 2.92mm RA F | 52 | 40 | SSMP RA M | 0C | 18 |
| 3.5mm M | 47 | 34 | SBMA M | 66 | 18 |
| 3.5mm F | 60 | 34 | SBMA RA M | 67 | 18 |
| SMA M | 01 | 27 | SBMA F | 68 | 18 |
| SMA F | 02 | 27 | BNC M | 15 | 4 |
| SMA RA M | 05 | 18 | BNC F | 16 | 4 |
| SMA RA F | 51 | 18 | 7/16 M | 49 | 6 |
| N M | 07 | 18 | 7/16 F | 45 | 6 |
| N F | 08 | 18 | 7/16 RA M | 53 | 6 |
| N RA M | 50 | 16 | NMD3.5 F | 83 | 34 |
| TNC M | 11 | 18 | NMD2.4 F | 76 | 50 |
| TNC F | 12 | 18 | NMD2.92 M | 0V | 40 |
| TNC RA M | 55 | 11 | NMD2.92 F | 0U | 40 |
| MCX M | 27 | 12 | NMD1.85 F | 1V | 67 |



A series Low Loss Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure & Temperature

(Excellent phase stability over positive temp., 220ppm@+22~+125°C,
well suited for high power transmitting equipment)

BENEFITS:

- ★ Excellent & consistent mechanical & electrical performance
- ★ Low loss, low VSWR & high power handling
- ★ High shielding effectiveness
- ★ Phase stability over positive temp.

APPLICATIONS:

- ★ RF, microwave & millimeter wave test systems
- ★ Airborne, ground & sea-based systems, both commercial & military

Construction

A02 Low Loss Flexible Cable Assembly with Excellent Phase Stability vs. Flexure & Temp.

220ppm@+22~+125 ,well suited for transmitters application

Construction



| Description | Diameter (mm) | Material |
|--------------------|---------------|--------------------|
| 1 Center conductor | 1.29 | Solid SPC |
| 2 Dielectric | 3.68 | Expanded PTFE Tape |
| 3 Outer conductor | 3.86 | SPC Strip |
| 4 Interlayer | 4.01 | Aluminum Polyester |
| 5 Outer Shield | 4.42 | SPC Braid |
| 6 Jacket | 4.95 | FEP |

Features & Advantage

- High shielding effectiveness
- Cost effective
- Outstanding phase stability over positive temp.
- Low loss, high power handling

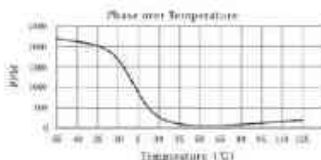
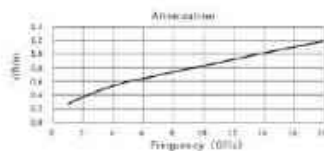
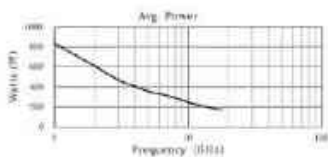
Electrical

Mechanical & Environmental

| | |
|--------------------------------|-----------|
| Bend Radius: installation (mm) | 25.4 |
| Bend Radius: repeated (mm) | 50.8 |
| Weight (g/m) | 65.5 |
| Temp, Operating (°C) | -5.5~+200 |

| | | | |
|----------------------------|------|---------------------------------------|------------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < 45 |
| Velocity of Propagation(%) | 80 | Cut-Off Frequency(GHz) | 30 |
| Delay Time (ns/m) | 4.14 | Flex. Phase Stability* | ±3.5@18GHz |
| Capacitance (pF/m) | 82 | Temp. Phase Stability PPM(+25~+125°C) | ±20 |
| Voltage Withstand (V) | 2000 | Amplitude Stability*(dB@18GHz)* | < ±0.05 |

* Phase and amplitude stability test method: in every the cable 200' around a standard which radius is 10 times the cable diameter.



Attenuation (Typical@25°C) & Power(20°C, Sea Level)

| | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| Attenuation (dB/m) | 0.27 | 0.37 | 0.46 | 0.54 | 0.60 | 0.64 | 0.74 | 0.83 | 0.92 | 1.01 | 1.10 | 1.18 |
| Avg. Power (W) | 834 | 606 | 469 | 404 | 356 | 334 | 289 | 244 | 218 | 198 | 182 | 169 |

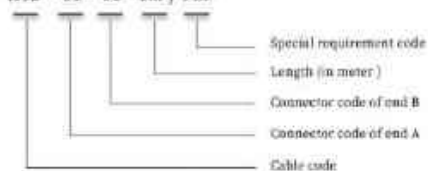


Connector & Assembly Information



Part Numbering Code

A02 - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with '0'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Arms |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | |
|--|--|---|
|  <p>Type: SMA Male P/N: SMA-J-02-00 Code: 01 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female P/N: SMA-K-03-00A Code: 02 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male RA P/N: SMA-JW-01-00 Code: 05 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.30:1</p> |
|  <p>Type: 3.5 Male P/N: 3.5-J-02-00 Code: 47 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-04-00 Code: 40 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1</p> |  <p>Type: N Male P/N: N-J-04-00A Code: 07 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.25:1</p> |
|  <p>Type: N Male RA P/N: N-JW-04-00 Code: 50 Mat.: Stainless steel Freq.: 16GHz VSWR: 1.30:1</p> |  <p>Type: N Female P/N: N-K-02-00 Code: 08 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.40:1</p> |  <p>Type: TNC Male P/N: TNC-J-04-00 Code: 11 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.25:1</p> |

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)


| Model | Connector Type | | Length in | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|----------------|----------------|-------------|--------------|---------------------------------|-------|------|----------|---------|-------|------|-----------|
| | Connector 1 | Connector 2 | | 0C-2-3 | 2-3-4 | 4-12 | 12-18 | 0C-2-3 | 2-3-4 | 4-12 | 12-18 |
| A02-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.05 | 1.10 | 1.20 | 1.25 |
| A02-01-01-1M | SMA Male | SMA Male | 1.0 | 0.7 | 0.8 | 1.2 | 1.6 | 1.25 | 1.30 | 1.25 | 1.25 |
| A02-01-01-1.5M | SMA Male | SMA Male | 1.5 | 0.9 | 1.2 | 1.7 | 2.2 | 1.30 | 1.30 | 1.25 | 1.25 |
| A02-01-01-2.0M | SMA Male | SMA Female | 2.0 | 0.8 | 0.8 | 0.8 | 1.0 | 1.10 | 1.20 | 1.20 | 1.20 |
| A02-01-01-3M | SMA Male | SMA Female | 3.0 | 0.7 | 0.9 | 1.2 | 1.6 | 1.10 | 1.20 | 1.25 | 1.30 |
| A02-01-02-1.5M | SMA Male | SMA Female | 1.5 | 0.9 | 1.2 | 1.7 | 2.2 | 1.25 | 1.30 | 1.27 | 1.30 |
| A02-01-07-0.5M | SMA Male | N Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.10 | 1.10 | 1.20 | 1.20 |
| A02-01-07-1M | SMA Male | N Male | 1.0 | 0.7 | 0.9 | 1.2 | 1.6 | 1.10 | 1.20 | 1.20 | 1.20 |
| A02-01-07-1.5M | SMA Male | N Male | 1.5 | 0.9 | 1.2 | 1.7 | 2.2 | 1.10 | 1.20 | 1.20 | 1.20 |
| A02-07-07-0.5M | N Male | N Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.15 | 1.20 | 1.25 | 1.30 |
| A02-07-07-1M | N Male | N Male | 1.0 | 0.7 | 0.9 | 1.2 | 1.6 | 1.20 | 1.20 | 1.25 | 1.30 |
| A02-07-07-1.5M | N Male | N Male | 1.5 | 0.9 | 1.2 | 1.7 | 2.2 | 1.10 | 1.20 | 1.25 | 1.30 |
| A02-07-07-2M | N Male | N Male RA | 2.0 | 0.9 | 1.2 | 1.7 | 2.2(16G) | 1.10 | 1.20 | 1.20 | 1.25(16G) |
| A02-07-07-3M | N Male | N Male RA | 3.0 | 1.1 | 1.6 | 2.2 | 2.7(16G) | 1.10 | 1.20 | 1.20 | 1.25(16G) |
| A02-07-07-3M | N Male | N Male RA | 3.0 | 1.3 | 1.7 | 2.6 | 3.2(16G) | 1.10 | 1.20 | 1.20 | 1.25(16G) |



A04I Low Loss Flexible Cable Assembly with Excellent Phase Stability vs. Flexure & Temp.

220ppmm@+22~+125 C, well suited for transmitter application

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|--------------------|
| 1 | Center conductor | 2.26 | Solid SPC |
| 2 | Dielectric | 6.35 | Expanded PTFE Tape |
| 3 | Outer conductor | 6.48 | SPC Strip |
| 4 | Innerlayer | 6.63 | Aluminum Polyester |
| 5 | Outer shield | 7.04 | SPC Braid |
| 6 | Jacket | 7.65 | PEP |

Features & Advantage

- High shielding effectiveness
- Cost effective
- Outstanding phase stability over positive temp.
- Low loss, high power handling

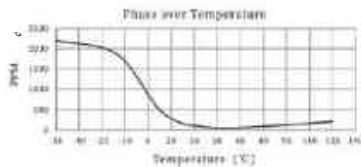
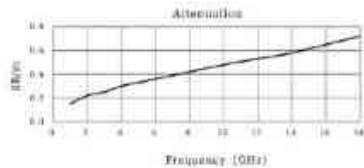
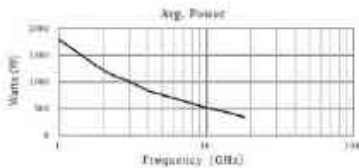
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Band Radius: Installation (mm) | 38.1 |
| Band Radius: repaired (mm) | 76.2 |
| Weight (g/m) | 313 |
| Temp. Operating (°C) | -55~+200 |

Electrical

| | | | |
|----------------------------|------|---------------------------------------|-------------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < -45 |
| Velocity of Propagation(%) | 82 | Cut-Off Frequency(GHz) | 18 |
| Delay Time (ns/m) | 4.14 | Flex. Phase Stability* | ±5.4°@18GHz |
| Capacitance (pF/m) | 82 | Temp. Phase Stability PPM(+22~+125°C) | 220 |
| Voltage Withstand (V) | 2800 | Amplitude stability*(dB@18GHz)* | < ±0.03 |

* Phase and amplitude stability test method: to mean the cable will around a circle which radius is 10 times the cable diameter



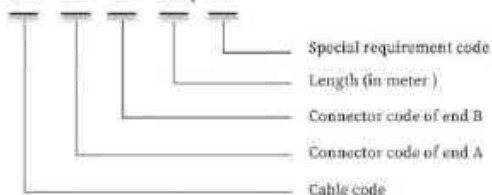
Attenuation (Typical@25°C) & Power(20°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.10 | 0.22 | 0.25 | 0.30 | 0.33 | 0.35 | 0.42 | 0.48 | 0.53 | 0.58 | 0.65 | 0.72 |
| Avg. Power (W) | 1745 | 1217 | 1005 | 838 | 700 | 607 | 507 | 520 | 471 | 420 | 384 | 347 |



Part Numbering Code

A04I - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with 'W'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | |
|--|--|--|
|  <p>Type: SMA Male P/N: SMA-J-01-00D Code: 01 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: SMA Female P/N: SMA-K-01-00A Code: 02 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: N Male P/N: N-J-01-00A Code: 07 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |
|  <p>Type: N Female P/N: N-K-04-02 Code: 08 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.30:1</p> |  <p>Type: TNC Male P/N: TNC-J-01-00 Code: 11 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: L29 Male P/N: L29-J-01-00A Code: 49 Mat.: Brass Freq.: 8GHz VSWR: 1.20:1</p> |
|  <p>Type: L29 Male BA P/N: L29-JW-01-00 Code: 53 Mat.: Brass Freq.: 8GHz VSWR: 1.30:1</p> | <p>Note: Customized connectors are available on request</p> | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------|----------------|-------------|-------------|---------------------------------|-----------|----------|-----------|------------|-----------|----------|-----------|
| | Connector 1 | Connector 2 | | DC-2.8 GHz | 2.8-6 GHz | 6-11 GHz | 12-18 GHz | DC-2.8 GHz | 2.8-6 GHz | 6-11 GHz | 12-18 GHz |
| A04I-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.15 | 1.20 | 1.25 | 1.30 |
| A04I-01-01-1M | SMA Male | SMA Male | 1.0 | 0.5 | 0.7 | 1.0 | 1.2 | 1.25 | 1.25 | 1.25 | 1.30 |
| A04I-01-01-1.5M | SMA Male | SMA Male | 1.5 | 0.7 | 0.9 | 1.3 | 1.6 | 1.35 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-0.5M | SMA Male | N Male | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.15 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-1M | SMA Male | N Male | 1.0 | 0.5 | 0.7 | 1.0 | 1.2 | 1.25 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-1.5M | SMA Male | N Male | 1.5 | 0.7 | 0.9 | 1.3 | 1.6 | 1.35 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-0.5M | N Male | N Male | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.15 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-1M | N Male | N Male | 1.0 | 0.5 | 0.7 | 1.0 | 1.2 | 1.25 | 1.20 | 1.25 | 1.30 |
| A04I-01-07-1.5M | N Male | N Male | 1.5 | 0.7 | 0.9 | 1.3 | 1.6 | 1.35 | 1.20 | 1.25 | 1.30 |
| A04I-01-08-0.5M | N Male | N Female | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.15 | 1.25 | 1.35 | 1.50 |
| A04I-01-08-1M | N Male | N Female | 1.0 | 0.5 | 0.7 | 1.0 | 1.2 | 1.30 | 1.25 | 1.35 | 1.50 |
| A04I-01-08-1.5M | N Male | N Female | 1.5 | 0.7 | 0.9 | 1.3 | 1.6 | 1.50 | 1.25 | 1.35 | 1.50 |
| A04I-11-11-0.5M | TNC Male | TNC Male | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.15 | 1.10 | 1.15 | 1.10 |
| A04I-11-11-1M | TNC Male | TNC Male | 1.0 | 0.5 | 0.7 | 1.0 | 1.2 | 1.15 | 1.20 | 1.25 | 1.30 |

A11 Super High Power Handling Cable Assembly

Average power: 3340W@1GHz, very suited for high-power transmitter applications

Construction



| | Description | Diameter:(mm) | Material |
|---|------------------|---------------|--------------------|
| 1 | Center conductor | 4.04 | Stranded SPC |
| 2 | Dielectric | 10.67 | Expanded PTFE Tape |
| 3 | Outer conductor | 10.97 | SPC Strip |
| 4 | Outer shield | 11.48 | SPC Braid |
| 5 | Jacket | 12.19 | PEP |

Features & Advantage

- Super high power handling, low loss
- Very flexible with stranded conductor structure
- High shielding effectiveness
- Good phase and amplitude stability

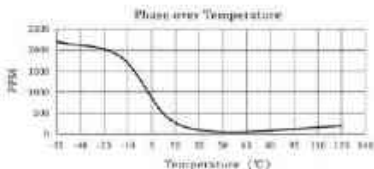
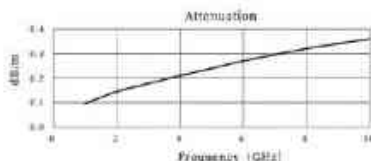
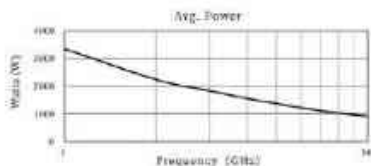
Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: Installation (mm) | 69.85 |
| Bend Radius: repeated (mm) | 139.7 |
| Weight (g/m) | 293 |
| Temp. Operating (°C) | -55 ~ +200 |

Electrical

| | | | |
|----------------------------|------|---------------------------------------|-------------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | > 40 |
| Velocity of Propagation(%) | 82.5 | Cut-Off Frequency(GHz) | 10 |
| Delay Time (ns/m) | 4.04 | Flex. Phase Stability* | ±0.4°@10GHz |
| Capacitance (pF/m) | 83.4 | Temp. Phase Stability PPM(±22~+125°C) | ±20 |
| Voltage Withstand (V) | 6000 | Amplitude stability*(dB@10GHz)* | <±0.50 |

* Phase and amplitude stability test method: to wrap the cable 20° around a mandrel when a voltage is 0.6 times the cable's capacity



Attenuation (Typical@25°C) & Power(20°C, Sea Level)

| | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 0.4 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 |
| Attenuation (dB/m) | 0.08 | 0.10 | 0.15 | 0.18 | 0.23 | 0.24 | 0.27 | 0.32 | 0.36 |
| Avg. Power (W) | 5430 | 3340 | 2234 | 1830 | 1551 | 1370 | 1213 | 1024 | 910 |

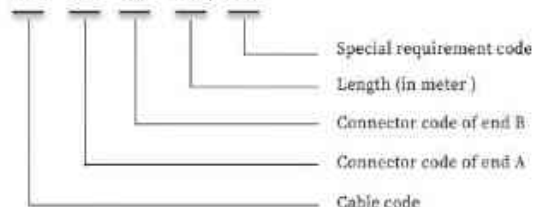


Connector & Assembly Information



Part Numbering Code

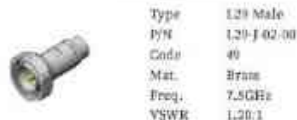
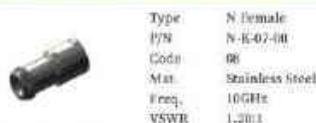
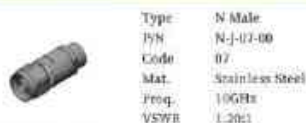
A11 - 07 - 07 - 1M / PM



**If only one connector requested, one of the connector code can be replaced with '00'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | FIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

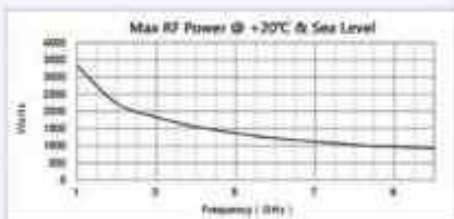
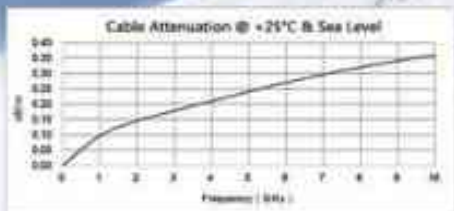
| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | | |
|----------------|----------------|-------------|-------------|---------------------------------|-------|-------|--------|--------|---------|-------|---------------|--|
| | Connector 1 | Connector 2 | | DC-2.0 GHz | 1.5-6 | 6-7.5 | 7.5-10 | DC-2.5 | 2.5-6 | 6-7.5 | 7.5-10 GHz | |
| A11-07-07-0.1M | N Male | N Male | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 1.20 | 1.25 | 1.25 | 1.20 | |
| A11-07-07-0.3M | N Male | N Male | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 1.20 | 1.25 | 1.25 | 1.30 | |
| A11-07-07-1M | N Male | N Male | 1.0 | 0.5 | 0.6 | 0.6 | 0.8 | 1.20 | 1.25 | 1.25 | 1.30 | |
| A11-07-07-1.5M | N Male | N Male | 1.5 | 0.6 | 0.8 | 0.8 | 1.0 | 1.20 | 1.25 | 1.25 | 1.30 | |
| A11-07-07-2M | N Male | N Male | 2.0 | 0.7 | 0.9 | 1.0 | 1.2 | 1.20 | 1.25 | 1.25 | 1.30 | |
| A11-07-07-3M | N Male | N Male | 3.0 | 1.0 | 1.2 | 1.3 | 1.6 | 1.20 | 1.25 | 1.25 | 1.30 | |
| A11-49-49-0.3M | 7/16 Male | 7/16 Male | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 1.20 | 1.25 | 1.20 | | |
| A11-49-49-0.5M | 7/16 Male | 7/16 Male | 0.5 | 0.3 | 0.5 | 0.5 | 0.5 | 1.20 | 1.25 | 1.30 | | |
| A11-49-49-1M | 7/16 Male | 7/16 Male | 1.0 | 0.5 | 0.6 | 0.6 | 0.6 | 1.20 | 1.25 | 1.30 | | |
| A11-49-49-1.5M | 7/16 Male | 7/16 Male | 1.5 | 0.6 | 0.8 | 0.8 | 0.8 | 1.20 | 1.25 | 1.30 | | |
| A11-49-49-2M | 7/16 Male | 7/16 Male | 2.0 | 0.7 | 0.9 | 1.0 | 1.0 | 1.20 | 1.25 | 1.30 | | |
| A11-49-49-3M | 7/16 Male | 7/16 Male | 3.0 | 1.0 | 1.2 | 1.3 | 1.3 | 1.20 | 1.25 | 1.30 | | |

A11 Series DC~10GHz Ultra Low Loss Super High Power Cable Assemblies

Advantages & Features:

- Frequency up to 10 GHz
- Power Handling: 3340 W @ 1 GHz, 910 W @ 10 GHz
- Cable Attenuation: 0.10 dB/m Typ. @ 1 GHz
0.36 dB/m Typ. @ 10 GHz
- Double Shielded with Shielding Effectiveness: < - 90 dB
- Reinforced Passivated Stainless Steel Connectors
- Robust Construction with Advanced Strain Relief Design
- 2x16 & N Type Connectors Available

dB/m



A11 Cable Assemblies (N M-N M DC-9.4GHz - 1Meter)





B Series --Ultra Low Loss Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure & Temperature

(Excellent phase stability over wide temp. range, 500ppm@-55~+85°C)

BENEFITS:

- ★ Excellent & consistent mechanical & electrical performance
- ★ Low loss, low VSWR & high power handling
- ★ High shielding effectiveness
- ★ **Phase stable over flexure & wide temp. range(-55~+85°C)**
- ★ Good phase tracking performance

Applications

- ★ RF, microwave & millimeter wave test systems
- ★ Airborne, ground & sea-based systems, both commercial & military

B02 Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra low loss 2.21dB@40GHz, suitable for wide temp. phased array radar applications

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-----------|
| 1 | Center conductor | 1.02 | Solid SPC |
| 2 | Dielectric | 2.80 | LD-PDPE |
| 3 | Outer conductor | 3.00 | SPC Strip |
| 4 | Outer shield | 3.40 | SPC Braid |
| 5 | Jacket | 3.70 | FEP |

Features & Advantage

- Ultra low loss, 2.21dB@40GHz
- Excellent phase stability over flexure & wide temp. range
- Outstanding and consistent mechanical & electrical performance

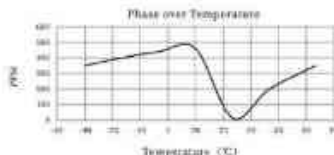
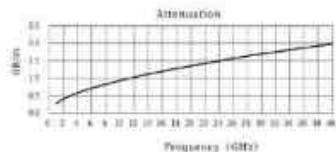
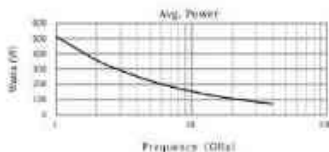
Mechanical & Environmental

| | |
|---------------------------------|-----------|
| Bend Radius (Installation) (mm) | 10 |
| Bend Radius (operated) (mm) | 30 |
| Weight (g/m) | 33 |
| Temp. Operating (°C) | -55 ~ +85 |

Electrical

| | | | |
|----------------------------|-------|---|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < -30 |
| Velocity of Propagation(%) | 82 | Cut-Off Frequency(GHz) | ∞ |
| Delay Time (ns/m) | 4.125 | Flex. Phase Stability* | ±3°@40GHz |
| Capacitance (pF/m) | 80.6 | Temp. Phase Stability (PPM) (-55~+85°C) | 580 |
| Voltage Withstand (V) | 1200 | Amplitude Stability*(dB@18GHz)* | < ±0.10 |

* Phase and amplitude stability measured by twisting the cable 360° around a mandrel with radius a 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.32 | 0.40 | 0.56 | 0.65 | 0.73 | 0.80 | 0.93 | 1.05 | 1.15 | 1.25 | 1.38 | 1.48 | 1.76 | 1.88 | 2.21 |
| Avg. Power (W) | 511 | 359 | 290 | 251 | 223 | 200 | 175 | 156 | 141 | 130 | 121 | 114 | 93 | 86 | 74 |

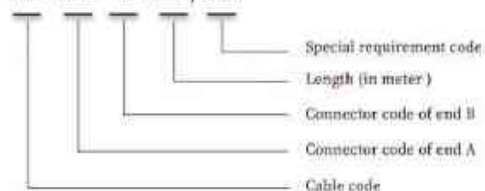


Connector & Assembly Information



Part Numbering Code

802 - 01 - 01 - 1M / PM



**If only one connector requested, one of the connector code can be replaced with '00'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IMT | PM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | |
|---|---|--|
|  <p>Type: SMA Male P/N: SMA-J-50-00 Code: 01 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.10:1</p> |  <p>Type: 3.5 Male P/N: 5.5-J-30-00 Code: 47 Mat: Stainless steel Freq: 34GHz VSWR: 1.10:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-25-00 Code: 404 Mat: Stainless steel Freq: 40GHz VSWR: 1.25:1</p> |
|  <p>Type: 2.92 Female P/N: 2.92-F-25-00 Code: 46 Mat: Stainless steel Freq: 40GHz VSWR: 1.25:1</p> |  <p>Type: 2.4 Male P/N: 2.4-J-14-00 Code: 39 Mat: Stainless steel Freq: 40GHz VSWR: 1.25:1</p> |  <p>Type: 2.4 Female P/N: 2.4-F-14-00 Code: 45 Mat: Stainless steel Freq: 40GHz VSWR: 1.25:1</p> |

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | | | | | VSWR(0.1) | |
|-----------------|----------------|-------------|-------------|---------------------------------|-------|---------|---------|------|------|---------|---------|-----------|------|
| | Connector A | Connector B | | mm | | | | | | | | dB | |
| | | | | 02-01 | 04-01 | 10-01-3 | 16-3-40 | 02-5 | 0-10 | 03-30.2 | 16-3-40 | | |
| 002-01-01-1.5M | SMA Male | SMA Male | 0.3 | 0.7 | 1.1 | 1.4 | | | | 1.20 | 1.20 | 1.25 | |
| 002-01-01-1M | SMA Male | SMA Male | 1.0 | 1.1 | 1.9 | 2.3 | | | | 1.20 | 1.20 | 1.25 | |
| 002-01-01-1.25M | SMA Male | SMA Male | 1.5 | 1.6 | 2.6 | 3.2 | | | | 1.20 | 1.20 | 1.25 | |
| 002-01-01-2.5M | 2.4 Male | 2.4 Male | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.4 Male | 2.4 Male | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.4 Male | 2.4 Male | 1.5 | 1.6 | 2.6 | 3.2 | 4.0 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-2.5M | 2.4 Male | 2.4 Female | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.4 Male | 2.4 Female | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.4 Male | 2.4 Female | 1.5 | 1.6 | 2.6 | 3.2 | 4.0 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-2.5M | 2.4 Female | 2.4 Female | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.4 Female | 2.4 Female | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.4 Female | 2.4 Female | 1.5 | 1.6 | 2.6 | 3.2 | 4.0 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.92 Male | 2.92 Male | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.92 Male | 2.92 Male | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.92 Male | 2.92 Female | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.92 Male | 2.92 Female | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-1.5M | 2.92 Female | 2.92 Female | 0.5 | 0.7 | 1.1 | 1.4 | 1.7 | | | 1.20 | 1.25 | 1.25 | 1.30 |
| 002-01-01-3M | 2.92 Female | 2.92 Female | 1.0 | 1.1 | 1.9 | 2.3 | 2.9 | | | 1.20 | 1.25 | 1.25 | 1.30 |



B10 Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra low loss 0.66dB@18GHz, suitable for every application

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-----------|
| 1 | Center conductor | 2.30 | Solid SPC |
| 2 | Dielectric | 6.25 | LD-PTFE |
| 3 | Outer conductor | 6.50 | SPC Strip |
| 4 | Outer shield | 6.91 | SPC Braid |
| 5 | Jacket | 7.50 | PEP |

Features & Advantage

- Ultra low loss, 0.66dB@18GHz
- Good phase stability over flexure & wide temp. range
- Light weight with 133g/m
- Small overall diameter of 7.50mm

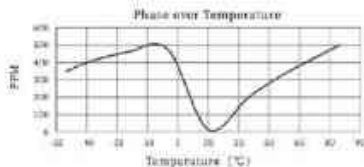
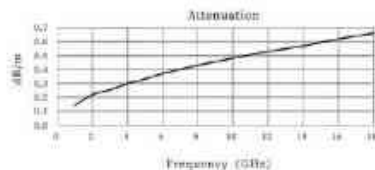
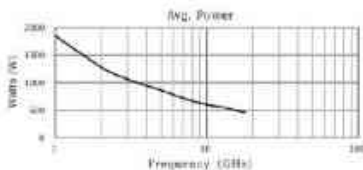
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius: Installation (mm) | 38.1 |
| Bend Radius: repeated (mm) | 76.2 |
| Weight (g/m) | 133 |
| Temp: Operating (°C) | -55~+200 |

Electrical

| | | | |
|----------------------------|------|--------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | <-90 |
| Velocity of Propagation(%) | 84.3 | Cut-Off Frequency(GHz) | 18 |
| Delay Time (ns/m) | 4.1 | Flex. Phase Stability* | <2°@18GHz |
| Capacitance (pF/m) | 78.7 | Temp. Phase Stability PPM(-55~+85°C) | 500 |
| Voltage Withstand (V) | 3000 | Amplitude Stability*(dB@18GHz)* | <±0.05 |

* Phase and Temp. stability by test method. # Amplitude stability 200* amount of number which reduce is 20 times the cable diameter.



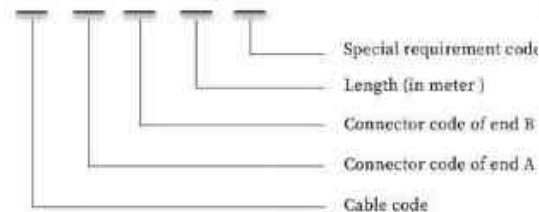
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.14 | 0.22 | 0.25 | 0.30 | 0.33 | 0.37 | 0.43 | 0.48 | 0.53 | 0.57 | 0.62 | 0.68 |
| Avg. Power (W) | 1850 | 1290 | 1060 | 945 | 860 | 780 | 670 | 600 | 565 | 525 | 480 | 455 |



Part Numbering Code

B10 - 01 - 01 - 1M / PM



**If only one connector requested, one of the connector code can be replaced*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|---|--|--|---|
|  <p>Type SMA Male P/N SMA-J-36-00 Code 014 Mat. Stainless steel Freq. 18GHz VSWR 1.30:1</p> |  <p>Type SMA Female P/N SMA-E-01-00F Code 02 Mat. Stainless steel Freq. 18GHz VSWR 1.25:1</p> |  <p>Type N Male P/N N-J-01-00A Code 97 Mat. Stainless steel Freq. 18GHz VSWR 1.25:1</p> |  <p>Type 4.3/10 Male P/N 4310-J-02-00 Code 1H Mat. Brass Freq. 10GHz VSWR 1.30:1</p> |
|  <p>Type N Female P/N N-E104-02 Code 08 Mat. Stainless steel Freq. 18GHz VSWR 1.30:1</p> |  <p>Type TNC Male P/N TNC-J-01-00 Code 11 Mat. Stainless steel Freq. 18GHz VSWR 1.25:1</p> |  <p>Type L29 Male P/N L29-J-01-00A Code 49 Mat. Brass Freq. 7.5GHz VSWR 1.20:1</p> | |

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | | | | | VSWR(1) | | | |
|------------------|----------------|-------------|-------------|---------------------------------|-------|------|-------|--------|-------|------|-------|---------|-----|-----|-----|
| | Connector 1 | Connector 2 | | GHz | | | | | | | | GHz | | | |
| | | | | 0C-2.5 | 2.5-4 | 4-11 | 11-18 | 0C-2.5 | 2.5-4 | 4-11 | 11-18 | | | | |
| B10-01-014-0.1M | SMA Male | SMA Male | 0.1 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 |
| B10-01-014-0.15M | SMA Male | SMA Male | 0.15 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 |
| B10-01-014-0.2M | SMA Male | SMA Male | 0.2 | 0.5 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 |
| B10-01-014-0.25M | SMA Male | SMA Male | 0.25 | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| B10-01-014-0.3M | SMA Male | SMA Male | 0.3 | 0.7 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 |
| B10-01-014-0.35M | SMA Male | SMA Male | 0.35 | 0.8 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 |
| B10-01-014-0.4M | SMA Male | SMA Male | 0.4 | 0.9 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 |
| B10-01-014-0.45M | SMA Male | SMA Male | 0.45 | 1.0 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 |
| B10-01-014-0.5M | SMA Male | SMA Male | 0.5 | 1.1 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 |
| B10-01-014-0.55M | SMA Male | SMA Male | 0.55 | 1.2 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 |
| B10-01-014-0.6M | SMA Male | SMA Male | 0.6 | 1.3 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
| B10-01-014-0.65M | SMA Male | SMA Male | 0.65 | 1.4 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 |
| B10-01-014-0.7M | SMA Male | SMA Male | 0.7 | 1.5 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 |
| B10-01-014-0.75M | SMA Male | SMA Male | 0.75 | 1.6 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 |
| B10-01-014-0.8M | SMA Male | SMA Male | 0.8 | 1.7 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 |
| B10-01-014-0.85M | SMA Male | SMA Male | 0.85 | 1.8 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 |
| B10-01-014-0.9M | SMA Male | SMA Male | 0.9 | 1.9 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 |
| B10-01-014-0.95M | SMA Male | SMA Male | 0.95 | 2.0 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 |
| B10-01-014-1.0M | SMA Male | SMA Male | 1.0 | 2.1 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 |
| B10-01-014-1.05M | SMA Male | SMA Male | 1.05 | 2.2 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 |
| B10-01-014-1.1M | SMA Male | SMA Male | 1.1 | 2.3 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 |
| B10-01-014-1.15M | SMA Male | SMA Male | 1.15 | 2.4 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 |
| B10-01-014-1.2M | SMA Male | SMA Male | 1.2 | 2.5 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 |
| B10-01-014-1.25M | SMA Male | SMA Male | 1.25 | 2.6 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
| B10-01-014-1.3M | SMA Male | SMA Male | 1.3 | 2.7 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 |
| B10-01-014-1.35M | SMA Male | SMA Male | 1.35 | 2.8 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 |
| B10-01-014-1.4M | SMA Male | SMA Male | 1.4 | 2.9 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 |
| B10-01-014-1.45M | SMA Male | SMA Male | 1.45 | 3.0 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 |
| B10-01-014-1.5M | SMA Male | SMA Male | 1.5 | 3.1 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 |
| B10-01-014-1.55M | SMA Male | SMA Male | 1.55 | 3.2 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 |
| B10-01-014-1.6M | SMA Male | SMA Male | 1.6 | 3.3 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 |
| B10-01-014-1.65M | SMA Male | SMA Male | 1.65 | 3.4 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 |
| B10-01-014-1.7M | SMA Male | SMA Male | 1.7 | 3.5 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 |
| B10-01-014-1.75M | SMA Male | SMA Male | 1.75 | 3.6 | 3.9 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 |
| B10-01-014-1.8M | SMA Male | SMA Male | 1.8 | 3.7 | 4.0 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 |
| B10-01-014-1.85M | SMA Male | SMA Male | 1.85 | 3.8 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 | 5.1 |
| B10-01-014-1.9M | SMA Male | SMA Male | 1.9 | 3.9 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 | 5.1 | 5.2 |
| B10-01-014-1.95M | SMA Male | SMA Male | 1.95 | 4.0 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 | 5.1 | 5.2 | 5.3 |
| B10-01-014-2.0M | SMA Male | SMA Male | 2.0 | 4.1 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5.0 | 5.1 | 5.2 | 5.3 | 5.4 |



B12Y Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra low loss 1.39dB@30GHz, suitable for wide temp. phased array radar applications

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-----------|
| 1 | Center conductor | 1.40 | Solid SPC |
| 2 | Dielectric | 3.90 | LD-PTFE |
| 3 | Outer conductor | 4.05 | SPC Strip |
| 4 | Outer shield | 4.60 | SPC Braid |
| 5 | Jacket | 5.10 | PEP |

Features & Advantage

- Ultra low loss, 1.39dB@30GHz
- Excellent phase stability over flexure & wide temp. range
- Small overall diameter of 5.10mm
- Consistent mechanical & electrical performance

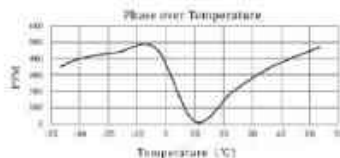
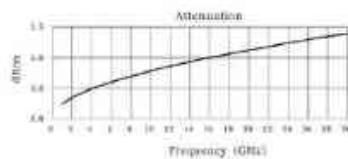
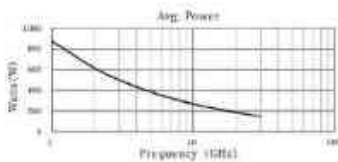
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius: installation (mm) | 20 |
| Bend Radius: repaired (mm) | 40 |
| Weight (g/m) | 50 |
| Temp. Operating (°C) | -55~+140 |

Electrical

| | | | |
|----------------------------|------|-------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < 90 |
| Velocity of Propagation(%) | 80 | Cut-Off Frequency(GHz) | 30 |
| Delay Time (ns/m) | 4.94 | Flex. Phase Stability* | 13°@30GHz |
| Capacitance (pF/m) | 63.6 | Temp. Phase Stability PPM(35~+85°C) | 500 |
| Voltage Withstand (V) | 2000 | Amplitude Stability*(50@150Hz)* | < ±0.35 |

* Phase and amplitude stability not restricted, to keep the cable 30° around its nominal which radius is 10 times the cable diameter.



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

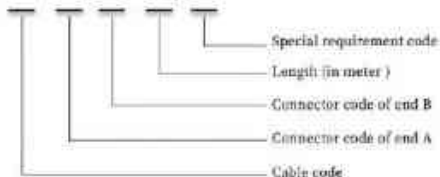
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|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 |
| Attenuation (dB/m) | 0.24 | 0.34 | 0.42 | 0.49 | 0.55 | 0.60 | 0.69 | 0.78 | 0.86 | 0.93 | 1.00 | 1.06 | 1.31 | 1.39 |
| Avg. Power (W) | 875 | 615 | 500 | 431 | 385 | 350 | 301 | 268 | 244 | 225 | 210 | 197 | 159 | 150 |

Connector & Assembly Information



Part Numbering Code

B12Y - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with 'W'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | FIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Type: SMA Male
P/N: SMA J-20-00
Code: 01
Mat.: Stainless steel
Freq.: 26.5GHz
VSWR: 1.25:1



Type: SMA Female
P/N: SMA J-15-00
Code: 47
Mat.: Stainless steel
Freq.: 26.5GHz
VSWR: 1.25:1



Type: N Male
P/N: N J12Y-00
Code: 07
Mat.: Stainless steel
Freq.: 18GHz
VSWR: 1.25:1



Type: TNC Male
P/N: TNC J12Y-00
Code: 11
Mat.: Stainless steel
Freq.: 18GHz
VSWR: 1.25:1



Type: TNC Female
P/N: TNC K-01-00
Code: 12
Mat.: Stainless steel
Freq.: 18GHz
VSWR: 1.30:1

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------|----------------|-------------|-------------|---------------------------------|-----------|----------|-----------|------------|-----------|----------|-----------|
| | Connector 1 | Connector 2 | | DC-2.5 GHz | 2.5-6 GHz | 6-12 GHz | 12-18 GHz | DC-2.5 GHz | 2.5-6 GHz | 6-12 GHz | 12-18 GHz |
| B12Y-01-01-0.3M | SMA Male | SMA Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-01-01-1M | SMA Male | SMA Male | 1.0 | 0.7 | 0.9 | 1.3 | 1.5 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-01-01-1.5M | SMA Male | SMA Male | 1.5 | 1.0 | 1.2 | 1.7 | 2.1 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-01-01-2M | SMA Male | SMA Male | 2.0 | 1.2 | 1.5 | 2.2 | 2.6 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-01-01-3M | SMA Male | SMA Male | 3.0 | 1.8 | 2.2 | 3.1 | 3.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-0.3M | N Male | N Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-0.5M | N Male | N Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-1M | N Male | N Male | 1.0 | 0.7 | 0.9 | 1.3 | 1.5 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-1.5M | N Male | N Male | 1.5 | 1.0 | 1.2 | 1.7 | 2.1 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-2M | N Male | N Male | 2.0 | 1.2 | 1.5 | 2.2 | 2.6 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-07-07-3M | N Male | N Male | 3.0 | 1.8 | 2.2 | 3.1 | 3.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-0.3M | TNC Male | TNC Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-0.5M | TNC Male | TNC Male | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-1M | TNC Male | TNC Male | 1.0 | 0.7 | 0.9 | 1.3 | 1.5 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-1.5M | TNC Male | TNC Male | 1.5 | 1.0 | 1.2 | 1.7 | 2.1 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-2M | TNC Male | TNC Male | 2.0 | 1.2 | 1.5 | 2.2 | 2.6 | 1.15 | 1.20 | 1.25 | 1.25 |
| B12Y-11-11-3M | TNC Male | TNC Male | 3.0 | 1.8 | 2.2 | 3.1 | 3.7 | 1.15 | 1.20 | 1.25 | 1.25 |



B08L Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra low loss 4.79dB@40GHz, suitable for wide temp. phased array radar applications

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|-----------|
| 1 | Center conductor | 0.50 | Solid SPC |
| 2 | Dielectric | 1.40 | LD-PFPE |
| 3 | Outer conductor | 1.70 | SPC Strip |
| 4 | Outer shield | 2.00 | SPC Braid |
| 5 | Jacket | 2.30 | PFA |

Features & Advantage

- Ultra low loss, 4.79dB@40GHz
- Small overall diameter of 2.3mm
- Excellent phase stability over flexure & wide temp. range
- Outstanding and consistent mechanical & electrical performance

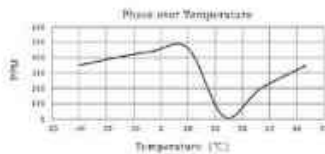
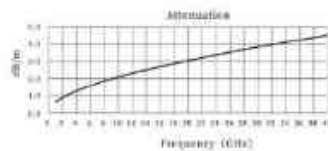
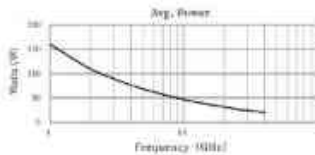
Mechanical & Environmental

| | |
|-------------------------------|------------|
| Bend Radius installation (mm) | 12.5 |
| Bend Radius repeated (mm) | 25.4 |
| Weight (g/m) | 14 |
| Temp. Operating (°C) | -65 ~ +200 |

Electrical

| | | | |
|----------------------------|------|--------------------------------------|-----------|
| Impedance (Ohm) | 50 | Shielding Effectiveness(dB) | < 40 |
| Velocity of Propagation(%) | 83 | Cut Off Frequency(GHz) | 55 |
| Delay Time (ns/m) | 1.04 | Flex. Phase Stability* | ±1°@40GHz |
| Capacitance (pF/m) | 89.6 | Temp. Phase Stability PPM(-55~+85°C) | 50 |
| Voltage Withstand (V) | 1000 | Amplitude Stability*(dB@40GHz)* | < 0.05 |

* Phase and amplitude stability not verified: to keep the cable 20° around a mounted solid angle or 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

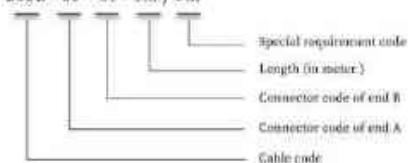
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 18 | 20.5 | 30 | 40 |
| Attenuation (dB/m) | 0.62 | 0.90 | 1.10 | 1.28 | 1.43 | 1.58 | 1.89 | 2.08 | 2.31 | 2.50 | 2.68 | 2.87 | 3.71 | 4.03 | 4.79 |
| Avg. Power (W) | 160 | 110 | 90 | 77 | 68 | 60 | 53 | 47 | 42 | 39 | 36 | 34 | 26 | 23 | 20 |

Connector & Assembly Information



Part Numbering Code

B08L- 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with '00'.

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Banding |
| IM | PM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|---|---|---|
|  <p>Type: SMA Male P/N: SMA-285-00 Code: 012 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male OA P/N: SMA-JW-05-00 Code: 0E Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Male P/N: 2.92-00-00A Code: 46 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Male P/N: 2.92-025-00 Code: 401 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |
|  <p>Type: 2.92 Female P/N: 2.92-0E-10-00 Code: 460 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.25:1</p> |  <p>Type: 2.4 Male P/N: 2.4-F-03-00 Code: 8F Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |  <p>Type: SSMA Male P/N: SSMA-J-04-00 Code: 2E Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.20:1</p> |  <p>Type: SMP Male P/N: SMP-J-09-00 Code: 80 Mat.: Brass Freq.: 18GHz VSWR: 1.30:1</p> |
|  <p>Type: SMP Male P/N: SMP-J-11-00 Code: 10V Mat.: Brass Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: SMP Female P/N: SMP-K-02-00 Code: 37 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female OA P/N: SMP-KW-02-06 Code: 38J Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SSMP Male P/N: SSMP-J-06-00 Code: 40 Mat.: Brass Freq.: 18GHz VSWR: 1.30:1</p> |
|  <p>Type: SSMP Male P/N: SSMP-J-01-00 Code: 1U Mat.: Brass Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: SSMP Female P/N: SSMP-K-01-00 Code: 1A Mat.: Brass Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: SSMP Female HF P/N: SSMP-KT-01-00 Code: 0T Mat.: Brass Freq.: 40GHz VSWR: 1.30:1</p> | |

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length (m) | Attenuation (Insertion Loss) (dB) | | | | | VSWR (1) | | | |
|-------------------|----------------|-------------|------------|-----------------------------------|-----|-----|-----|-----|----------|-----|-----|-----|
| | Connector 1 | Connector 2 | | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 |
| B08L-012-012-0.2M | SMA Male | SMA Male | 0.2 | 0.9 | 1.3 | 1.7 | 2.1 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 |
| B08L-012-012-0.3M | SMA Male | SMA Male | 0.3 | 1.1 | 1.6 | 2.1 | 2.6 | 3.1 | 3.6 | 4.1 | 4.6 | 5.1 |
| B08L-012-012-0.5M | SMA Male | SMA Male | 0.5 | 1.3 | 1.9 | 2.5 | 3.1 | 3.7 | 4.3 | 4.9 | 5.5 | 6.1 |
| B08L-401-401-0.2M | 2.92 Male | 2.92 Male | 0.2 | 0.8 | 1.3 | 1.7 | 2.1 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 |
| B08L-401-401-0.3M | 2.92 Male | 2.92 Male | 0.3 | 0.9 | 1.4 | 1.9 | 2.4 | 2.9 | 3.4 | 3.9 | 4.4 | 4.9 |
| B08L-401-401-0.5M | 2.92 Male | 2.92 Male | 0.5 | 1.1 | 1.7 | 2.3 | 2.9 | 3.5 | 4.1 | 4.7 | 5.3 | 5.9 |
| B08L-401-401-1M | 2.92 Male | 2.92 Male | 1.0 | 1.6 | 2.2 | 2.9 | 3.6 | 4.3 | 5.0 | 5.7 | 6.4 | 7.1 |

B16Y Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra low loss 2.85dB@46GHz, suitable for wide temp. phased array radar applications

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|-----------|
| 1 | Center conductor | 0.90 | Solid SPC |
| 2 | Dielectric | 2.40 | LD-PTFE |
| 3 | Outer conductor | 2.60 | SPC Strip |
| 4 | Outer shield | 3.30 | SPC Braid |
| 5 | Jacket | 3.60 | FEP |

Features & Advantage

- Ultra low loss, 2.85dB@46GHz
- Outstanding and consistent mechanical & electrical performance
- Excellent phase stability over flexure & wide temp. range
- Small overall diameter of 3.6mm

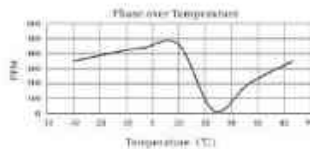
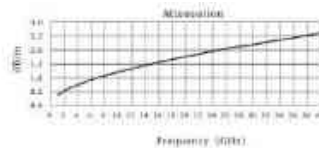
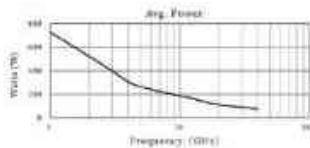
Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 25.4 |
| Bend Radius: repeated (mm) | 50.8 |
| Weight (g/m) | 33 |
| Temp. Operating (°C) | -55 ~ +200 |

Electrical

| | | | |
|----------------------------|------|-------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < 99 |
| Velocity of Propagation(V) | 85 | Cut-Off Frequency(GHz) | 46 |
| Delay Time (ns/m) | 4.04 | Flex. Phase Stability* | ±4°@40GHz |
| Capacitance (pF/m) | 80.6 | Temp. Phase Stability PPM(0C-H55C) | 300 |
| Voltage Withstand (V) | 1200 | Amplitude Stability*(dB@10GHz)* | < 10.05 |

* Phase and amplitude stability test method: one wrap flexure 30° around a mandrel which diameter is 1/3 times the cable diameter.



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

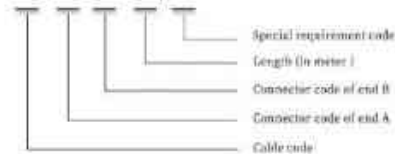
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 | 40 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.38 | 0.53 | 0.61 | 0.75 | 0.84 | 0.93 | 1.08 | 1.21 | 1.33 | 1.43 | 1.56 | 1.66 | 2.07 | 2.20 | 2.63 |
| Avg. Power (W) | 725 | 320 | 400 | 305 | 265 | 240 | 210 | 180 | 160 | 150 | 135 | 120 | 95 | 90 | 75 |

Connector & Assembly Information



Part Numbering Code

B16Y- 01 - 01 - 1M / PM



*If only one connector required, one of the connector code can be replaced with '0'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| # | Bending |
| IM3 | PM Year |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC jacket over Stainless Steel Braid & Spiral |
| NA | Nylok Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|--|--|---|
|  <p>Type: SMA Male P/N: SMA J101-08 Code: 01 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male P/N: SMA JZ 01-09 Code: 01Z Mat: Stainless steel Freq: 18GHz VSWR: 1.30:1 Self-locking</p> |  <p>Type: SMA Female P/N: SMA K-04-00G Code: 02 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: N Female P/N: N-K-11-09 Code: 08 Mat: Stainless steel Freq: 18GHz VSWR: 1.30:1</p> |
|  <p>Type: 2.92 Male P/N: 2.92-J-03-00 Code: 40 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 Female P/N: 2.92-K-01-00 Code: 46 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Male P/N: 2-4-J-03-00 Code: 39 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | |

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(:1) | | | |
|-----------------|----------------|-------------|-------------|---------------------------------|------|---------|---------|----------|------|---------|---------|
| | Connector 1 | Connector 2 | | DC-6 | 6-18 | 18-24.5 | 24.5-40 | DC-6 | 6-18 | 18-24.5 | 24.5-40 |
| GHz | | | | | | | | | | | |
| B16Y-01-01-0.3M | SMA Male | SMA Male | 0.3 | 0.6 | 0.9 | 1.1 | 1.29 | 1.30 | 1.25 | | |
| B16Y-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.8 | 1.3 | 1.6 | 1.29 | 1.30 | 1.35 | | |
| B16Y-01-01-1M | SMA Male | SMA Male | 1.0 | 1.3 | 2.1 | 2.6 | 1.29 | 1.30 | 1.35 | | |
| B16Y-01-01-1.5M | SMA Male | SMA Male | 1.5 | 1.7 | 3.0 | 3.7 | 1.29 | 1.30 | 1.35 | | |
| B16Y-01-01-2M | SMA Male | SMA Male | 2.0 | 2.2 | 3.8 | 4.7 | 1.29 | 1.30 | 1.35 | | |
| B16Y-01-01-3M | SMA Male | SMA Male | 3.0 | 3.2 | 5.5 | 6.8 | 1.29 | 1.30 | 1.35 | | |
| B16Y-40-40-0.2M | 2.92 Male | 2.92 Male | 0.2 | 0.6 | 0.9 | 1.1 | 1.15 | 1.25 | 1.30 | 1.35 | |
| B16Y-40-40-0.5M | 2.92 Male | 2.92 Male | 0.5 | 0.8 | 1.3 | 1.6 | 1.15 | 1.25 | 1.30 | 1.35 | |
| B16Y-40-40-1M | 2.92 Male | 2.92 Male | 1.0 | 1.3 | 2.1 | 2.6 | 1.15 | 1.25 | 1.30 | 1.35 | |
| B16Y-40-40-1.5M | 2.92 Male | 2.92 Male | 1.5 | 1.7 | 3.0 | 3.7 | 1.15 | 1.25 | 1.30 | 1.35 | |
| B16Y-40-40-2M | 2.92 Male | 2.92 Male | 2.0 | 2.2 | 3.8 | 4.7 | 1.15 | 1.25 | 1.30 | 1.35 | |
| B16Y-40-40-3M | 2.92 Male | 2.92 Male | 3.0 | 3.2 | 5.5 | 6.8 | 1.15 | 1.25 | 1.30 | 1.35 | |



B15 Ultra Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

500ppm@-55~+85°C, ultra flexible & durable, suitable for wide temp. phased array radar applications with frequent bending

Construction



| Description | Diameter(mm) | Material |
|--------------------|--------------|--------------|
| 1. Outer conductor | 1.07 | Stranded SPC |
| 2. Dielectric | 5.81 | LD ETFE |
| 3. Outer conductor | 3.00 | SPC 80tp |
| 4. Middle Layer | 3.31 | PTFE |
| 5. Outer Shield | 2.55 | SPC Braid |
| 6. Jacket | 3.98 | Green PEP |

Features & Advantage

- Low loss, ≤ 0.01 dB/40GHz
- Ultra flexible, ultra durable
- Outstanding and consistent mechanical & electrical performance

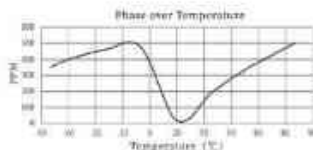
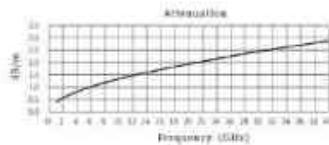
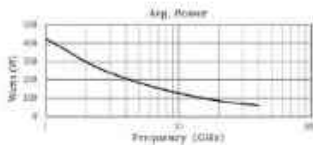
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius: installation (mm) | 16 |
| Bend Radius: repeated (mm) | 32 |
| Weight (g/m) | 40 |
| Temp. Operating (°C) | -55~+167 |

Electrical

| | | | |
|----------------------------|-------|-------------------------------------|------------------------|
| Impedance (Ohm) | 50 | Shielding Effectiveness(dB) | <-40 |
| Velocity of Propagation(V) | 83 | Cut Off Frequency(GHz) | 40 |
| Delay Time (ns/m) | 4.115 | Flex. Phase Stability* | $\pm 7^{\circ}$ @40GHz |
| Capacitance (pF/m) | 80.6 | Temp. Phase Stability PPM(55~+85°C) | 500 |
| Voltage Withstand (V) | 1500 | Amplitude Stability*(dB@40GHz)* | <-0.10 |

*Phase and amplitude stability not included. To keep the cable B15 around a constant value within 3-10 flexure cycles in 10 minutes



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

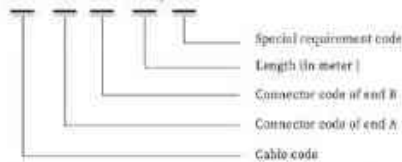
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 | 40 |
| Attenuation (dB/m) | 0.40 | 0.57 | 0.70 | 0.82 | 0.92 | 1.01 | 1.18 | 1.33 | 1.47 | 1.60 | 1.72 | 1.84 | 2.26 | 2.95 | 2.99 |
| Avg. Power (W) | 420 | 297 | 239 | 206 | 184 | 167 | 143 | 127 | 118 | 105 | 98 | 91 | 74 | 49 | 39 |

Connector & Assembly Information



Part Numbering Code

B15 - 01 - 01 - 1M / PM



If only one connector requested, one of the connector code can be replaced with '00'

| Code N | Special Requirement |
|--------|---|
| PM | Phase Match |
| B | Bending |
| DMJ | FDM Test |
| DF | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PWSVC Jacket over Stainless Steel braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length | | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | | | | |
|----------------|----------------|-------------|--------|-----|---------------------------------|------|---------|---------|------|---------|---------|---------|-----|-----|-----|
| | Connector 1 | Connector 2 | Feet | m | DC-8 | 8-18 | 18-26.5 | 26.5-40 | DC-0 | 0-18 | 18-26.5 | 26.5-40 | | | |
| | | | | | | | | | | | | | GHz | GHz | GHz |
| R15-01-01-1FT | SMA Male | SMA Male | 2.8 | 0.9 | 1.5 | 1.9 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-01-3FT | SMA Male | SMA Male | 3.0 | 1.2 | 1.4 | 2.4 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-01-0.3M | SMA Male | SMA Male | 0.5 | 0.8 | 1.2 | 1.7 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-01-1M | SMA Male | SMA Male | 1.0 | 1.3 | 2.0 | 2.8 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-01-1.5M | SMA Male | SMA Male | 1.5 | 1.8 | 3.2 | 4.0 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-01-2M | SMA Male | SMA Male | 2.0 | 2.3 | 4.2 | 5.2 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-1FT | SMA Male | SMA Female | 2.0 | 0.9 | 2.0 | 1.9 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-3FT | SMA Male | SMA Female | 3.0 | 1.2 | 1.4 | 2.4 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-0.3M | SMA Male | SMA Female | 0.5 | 0.8 | 1.2 | 1.7 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-1M | SMA Male | SMA Female | 1.0 | 1.3 | 2.0 | 2.8 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-1.5M | SMA Male | SMA Female | 1.5 | 1.8 | 3.2 | 4.0 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-01-02-2M | SMA Male | SMA Female | 2.0 | 2.3 | 4.2 | 5.2 | | | 1.20 | 1.30 | 1.35 | | | | |
| R15-30-00-2FT | 2.92 Male | 2.92 Male | 2.0 | 0.9 | 1.8 | 1.9 | 2.1 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |
| R15-40-00-3FT | 2.92 Male | 2.92 Male | 3.0 | 1.2 | 1.4 | 2.4 | 2.9 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |
| R15-40-00-0.3M | 2.92 Male | 2.92 Male | 0.5 | 0.8 | 1.2 | 1.7 | 1.9 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |
| R15-40-00-1M | 2.92 Male | 2.92 Male | 1.0 | 1.3 | 2.0 | 2.8 | 3.2 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |
| R15-40-00-1.5M | 2.92 Male | 2.92 Male | 1.5 | 1.8 | 3.2 | 4.0 | 4.5 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |
| R15-40-00-2M | 2.92 Male | 2.92 Male | 2.0 | 2.3 | 4.2 | 5.2 | 5.8 | 1.20 | 1.30 | 1.35 | 1.35 | | | | |



B110 Low Loss Flexible Cable Assembly with Excellent Phase Stability over Flexure & Temp.

Suitable for the connection of 110GHz systems/equipment & the construction of test platforms

Construction



| Description | Diameter (mm) | Material |
|---------------------|---------------|-------------|
| 1. Center conductor | 0.32 | Braided SPC |
| 2. Dielectric | 0.91 | LD-PTFE |
| 3. Outer conductor | 1.88 | SPC Strip |
| 4. Outer shield | 1.17 | SPC Braid |
| 5. Jacket | 1.42 | Green PTFE |

Features & Advantage

- Low loss
- Excellent Phase Stability over Flexure & Temp.
- Extremely Small Bending Radius

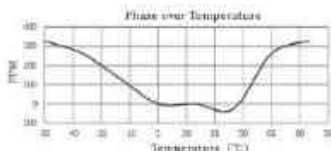
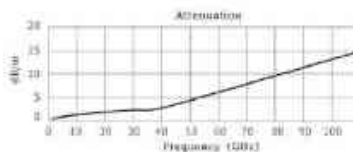
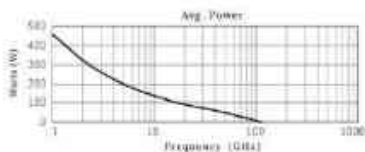
Mechanical & Environmental

| | |
|---------------------------------|------------|
| Bend Radius (Installation) (mm) | 3 |
| Bend Radius (Repeated) (mm) | 6 |
| Weight (g/m) | 3.3 |
| Temp. Operating (°C) | -65 ~ +150 |

Electrical

| | | | |
|----------------------------|-------|-------------------------------------|-----------|
| Impedance (Ohm) | 50 | Shielding Effectiveness(dB) | > -100 |
| Velocity of Propagation(%) | 79.7 | Cut-Off Frequency(GHz) | 143 |
| Delay Time (ns/m) | 4.244 | Flare Phase Stability* | ±5@110GHz |
| Capacitance (pF/m) | 84.7 | Temp. Phase Stability PPM(35~+85°C) | ±80 |
| Voltage Withstand (V) | 750 | Amplitude Stability*(dB@40GHz)* | < ±0.05 |

*Phase and amplitude stability test method: 10 megohm cable 360° around a mandrel which radius is 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

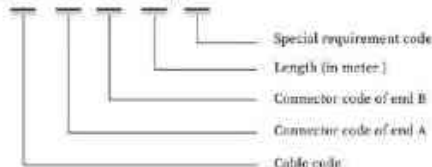
| | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 18 | 26.5 | 30 | 40 | 50 | 67 | 110 |
| Attenuation (dB/m) | 1.10 | 1.57 | 1.91 | 2.24 | 2.57 | 2.73 | 3.22 | 3.62 | 3.99 | 4.98 | 6.12 | 6.55 | 7.69 | 8.73 | 10.50 | 13.00 |
| Avg. Power (W) | 49.3 | 34.6 | 28.1 | 24.2 | 21.6 | 19.6 | 16.9 | 15 | 13.6 | 11 | 8.9 | 8.3 | 7.1 | 6.2 | 5.1 | 3.6 |

Connector & Assembly Information



Part Numbering Code

B110 - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with '00'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bonding |
| DM | DM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length (m) | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------|----------------|-------------|------------|---------------------------------|-------|-------|--------|---------|-------|-------|--------|
| | Connector 1 | Connector 2 | | DC-40 | 40-50 | 50-67 | 67-110 | DC-40 | 40-50 | 50-67 | 67-110 |
| B110-1Y-1Y-0.5M | 1.0 Male | 1.0 Male | 0.5 | 2.9 | 3.3 | 3.9 | 5.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Y-1Y-0.5M | 1.0 Male | 1.0 Male | 0.5 | 4.4 | 3.0 | 6.0 | 8.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Y-1Y-1M | 1.0 Male | 1.0 Male | 1.0 | 8.2 | 9.4 | 11.1 | 16.0 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Y-1Z-0.5M | 1.0 Male | 1.0 Female | 0.5 | 2.9 | 3.3 | 3.9 | 5.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Y-1Z-0.5M | 1.0 Male | 1.0 Female | 0.5 | 4.4 | 3.0 | 6.0 | 8.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Y-1Z-1M | 1.0 Male | 1.0 Female | 1.0 | 8.2 | 9.4 | 11.1 | 16.0 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Z-1Z-0.5M | 1.0 Female | 1.0 Female | 0.5 | 2.9 | 3.3 | 3.9 | 5.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Z-1Z-0.5M | 1.0 Female | 1.0 Female | 0.5 | 4.4 | 3.0 | 6.0 | 8.5 | 1.30 | 1.30 | 1.35 | 1.45 |
| B110-1Z-1Z-1M | 1.0 Female | 1.0 Female | 1.0 | 8.2 | 9.4 | 11.1 | 16.0 | 1.30 | 1.30 | 1.35 | 1.45 |



C Series --Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure

BENEFITS:

- ★ Excellent & consistent mechanical & electrical performance
- ★ Low loss, low VSWR & high power handling
- ★ High shielding effectiveness
- ★ Phase stable over flexure
- ★ Good phase tracking performance

APPLICATIONS:

- ★ RF, microwave & millimeter wave test systems
- ★ Airborne, ground & sea-based systems, both commercial & military

Your Widest Choice In Stock for .047" Cable Assemblies



Propagation Velocity: 70%
Shielding Effectiveness: > 100dB



Propagation Velocity: 70%
Shielding Effectiveness: > 100dB
Phase Stability vs. Temp: $\pm 0.001dB/$C



High Strength (3044 Layer)
Propagation Velocity: 70%
Shielding Effectiveness: > 100dB
Phase Stability vs. Temp: $\pm 0.001dB/$C



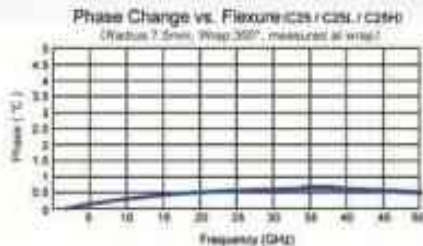
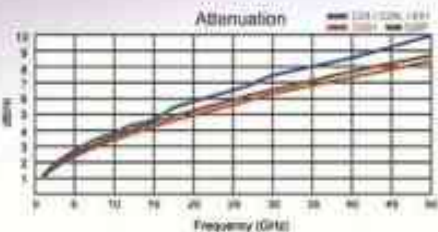
Propagation Velocity: 75.7%
Shielding Effectiveness: > 100dB
Phase Stability vs. Temp: $\pm 0.001dB/$C
Heat Soak vs. Temp: $\pm 0.001dB/$C



Propagation Velocity: 87%
Shielding Effectiveness: > 100dB
Phase Stability vs. Temp: $\pm 0.0002dB/$C
Phase Stability vs. Temp: $\pm 0.0002dB/$C

SRFS offers 5 kinds of .047" cables to meet various applications. They are semi-rigid and four versions of flexible cables. For each cable, there are wide range of connectors for your choice, including SMA, MCX, SMP, 2.92, 2.4 and 1.85mm, etc. These cable assemblies have excellent VSWR, stable performance and high reliability.

| Code | Description | Frequency (GHz) | VSWR (d.B) |
|------|------------------------|-----------------|------------|
| 01 | SMA Straight Male | 26.5 | 1.20 |
| 07 | SMC Straight Male | 50 | 1.22 |
| 34 | SMP Straight Male | 40 | 1.40 |
| 07 | SMP Straight Female | 40 | 1.40 |
| 08 | SMP Right Angle Female | 18 | 1.40 |
| 40 | 2.92mm Straight Male | 40 | 1.20 |
| 40 | 2.92mm Straight Female | 40 | 1.20 |
| 04 | SMP Straight Female | 26.5 | 1.20 |
| 06 | SMP Right Angle Male | 40 | 1.40 |
| 06 | 2.4mm Straight Male | 40 | 1.20 |
| 08 | 2.4mm Straight Female | 40 | 1.20 |
| 05 | 1.85mm Straight Male | 37 | 1.20 |
| 07 | 1.85mm Straight Female | 37 | 1.20 |



C02 High Shielding Flexible Cable Assembly, Replacement of Semi-rigid .141 Cable

High shielding effectiveness <math>< -110\text{dB}</math>, excellent phase stability over flexure $\pm 3^\circ@26.5\text{GHz}</math>$

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-------------|
| 1 | Center conductor | 0.92 | Solid SPCW |
| 2 | Dielectric | 3.00 | PTFE |
| 3 | Outer conductor | 3.25 | SFC Strip |
| 4 | Outer shield | 3.50 | SFC Braided |
| 5 | Jacket | 4.20 | PEP |

Features & Advantage

- High shielding effectiveness $< -110\text{dB}</math>$
- Good phase stability over flexure
- Very flexible, high mechanical strength
- Direct replacement of .141 semi-rigid cable

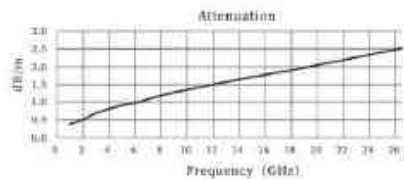
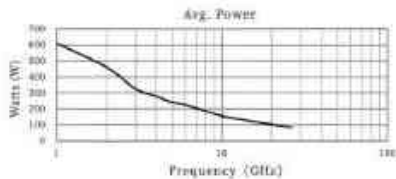
Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 21 |
| Bend Radius: repeated (mm) | 42 |
| Weight (g/m) | 48 |
| Temp. Operating (°C) | -55 ~ +200 |

Electrical

| | | | |
|----------------------------|------|--------------------------------|-------------------------------------|
| Impedance (Ohm) | 50 | Shielding Effectiveness(dB) | <math>< -110</math> |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 34 |
| Delay Time (ns/m) | 4.6 | Flex. Phase Stability* | $\pm 3^\circ@26.5\text{GHz}</math>$ |
| Capacitance (pF/m) | 95.0 | Amplitude Stability*(dB@10GHz) | <math>< 0.05</math> |
| Voltage Withstand (V) | 1900 | | |

* Phase and amplitude stability (not constant) - to map the cable into a standard network which defines a Jitter in the cable diameter.



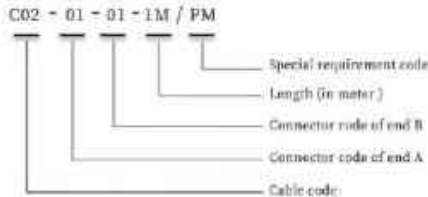
Attenuation (Typical@25°C) & Power(20°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 26.5 | 30 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.39 | 0.53 | 0.68 | 0.81 | 0.91 | 0.98 | 1.19 | 1.35 | 1.50 | 1.64 | 1.77 | 1.90 | 2.02 | 2.38 | 2.76 |
| Avg. Power (W) | 610 | 461 | 325 | 238 | 240 | 224 | 185 | 153 | 140 | 128 | 118 | 110 | 83 | 83 | 70 |

Connector & Assembly Information



Part Numbering Code



*If only one connector required, one of the connector code can be replaced with 'W'

| Code N | Special Requirement |
|--------|---|
| PM | Phase Match |
| B | Bonding |
| IM3 | IM3 Test |
| DL | Delay Line |
| WA | Unshielded Stainless Steel Armor |
| VA | Armor with FGD/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | |
|--|---|---|
|  <p>Type: SMA Male P/N: SMA-X-04-008 Code: 01 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMA Female P/N: SMA-X-04-00 Code: 02 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: 3.5 Male P/N: 3.5-J-01-00A Code: 47 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.30:1</p> |
|  <p>Type: 3.5 Female P/N: 3.5-K-01-00A Code: 60 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: RMMP Male P/N: RMMP-J-02-00 Code: 3D Mat: Stainless steel Freq: 26.5GHz VSWR: 1.25:1</p> <p><i>Down to Contact</i></p> |  <p>Type: RMMP Female P/N: RMMP-K-01-00 Code: 1C Mat: Stainless steel Freq: 26.5GHz VSWR: 1.25:1</p> <p><i>Down to Contact</i></p> |
|  <p>Type: TNC Male P/N: TNC-J-02-00 Code: 11 Mat: Stainless steel Freq: 18GHz VSWR: 1.25:1</p> |  <p>Type: N Male P/N: N-J-02-00 Code: 07 Mat: Stainless steel Freq: 38GHz VSWR: 1.25:1</p> |  <p>Type: N Female P/N: N-K-04-00 Code: 08 Mat: Stainless steel Freq: 6GHz VSWR: 1.25:1</p> |

Notes: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|----------------|----------------|-------------|-------------|---------------------------------|-----------|----------|-------------|------------|-----------|----------|-------------|
| | Connector 1 | Connector 2 | | DC-2.3 GHz | 2.3-4 GHz | 4-12 GHz | 13-18.5 GHz | DC-2.3 GHz | 2.3-4 GHz | 4-12 GHz | 13-18.5 GHz |
| C02-01-01-0.3M | SMA Male | SMA Male | 0.3 | 0.4 | 0.6 | 1.0 | 1.2 | 1.10 | 1.20 | 1.30 | 1.30 |
| C02-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.6 | 0.9 | 1.3 | 1.6 | 1.13 | 1.20 | 1.28 | 1.35 |
| C02-01-01-1M | SMA Male | SMA Male | 1.0 | 1.0 | 1.4 | 2.5 | 3.0 | 1.13 | 1.20 | 1.30 | 1.35 |
| C02-01-01-1.5M | SMA Male | SMA Male | 1.5 | 1.1 | 2.0 | 3.4 | 4.7 | 1.10 | 1.20 | 1.30 | 1.35 |
| C02-01-01-2M | SMA Male | SMA Male | 2.0 | 1.7 | 2.5 | 4.0 | 5.1 | 1.11 | 1.20 | 1.30 | 1.35 |
| C02-01-01-3M | SMA Male | SMA Male | 3.0 | 2.0 | 3.0 | 6.7 | 8.9 | 1.15 | 1.20 | 1.25 | 1.35 |
| C02-01-07-0.3M | SMA Male | N Male | 0.3 | 0.4 | 0.6 | 1.0 | 1.2 | 1.10 | 1.20 | 1.30 | 1.30 |
| C02-01-07-0.5M | SMA Male | N Male | 0.5 | 0.6 | 0.9 | 1.3 | 1.6 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-01-07-1M | SMA Male | N Male | 1.0 | 1.0 | 1.4 | 2.3 | 2.8 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-01-07-1.5M | SMA Male | N Male | 1.5 | 1.3 | 2.0 | 3.0 | 4.0 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-07-07-0.3M | N Male | N Male | 0.3 | 0.4 | 0.6 | 1.0 | 1.2 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-07-07-0.5M | N Male | N Male | 0.5 | 0.6 | 0.9 | 1.3 | 1.6 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-07-07-1M | N Male | N Male | 1.0 | 1.0 | 1.4 | 2.5 | 3.0 | 1.13 | 1.20 | 1.30 | 1.30 |
| C02-07-07-1.5M | N Male | N Male | 1.5 | 1.3 | 2.0 | 3.4 | 4.7 | 1.13 | 1.20 | 1.30 | 1.30 |

C03 High Shielding Flexible Cable Assembly, Replacement of Semi-rigid .086 Cable

High shielding effectiveness <-110dB, excellent phase stability over flexure ±3.5°@40GHz

Construction



| Description | Diameter(mm) | Material |
|---------------------|--------------|------------|
| 1. Center conductor | 0.51 | Solid SPCW |
| 2. Dielectric | 1.83 | PTFE |
| 3. Outer conductor | 1.81 | SPC Strip |
| 4. Outer shield | 2.19 | SPC Inert |
| 5. Jacket | 2.64 | FRP |

Features & Advantage

- High shielding effectiveness <110dB
- Good phase stability over flexure
- Very flexible, high mechanical strength
- Direct replacement of .086 semi-rigid cable

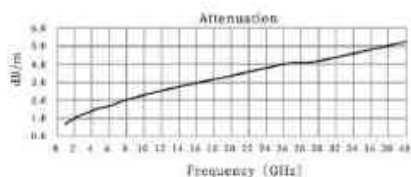
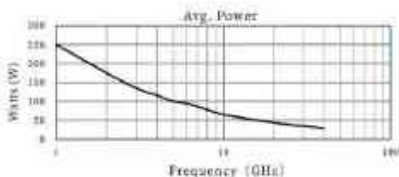
Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 12.7 |
| Bend Radius: repeated (mm) | 25.4 |
| Weight (gram) | 21 |
| Temp. Operating (°C) | -55 ~ +200 |

Electrical

| | | | |
|----------------------------|------|-------------------------------|-------------|
| Impedance (Ohms) | 30 | Shielding Effectiveness(dB) | <-110 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 64 |
| Delay Time (ns/m) | 4.6 | Flex. Phase Stability* | ±3.5°@40GHz |
| Capacitance (pF/m) | 96.5 | Amplitude Stability*(@40GHz)* | <-10 dB |
| Voltage Withstand (V) | 1100 | | |

* Phase and amplitude stability test method: to separate cable 30° around a number of which cables is 10 times the cable diameter



Attenuation (Typical@25°C) & Power(20°C, Sea Level)

| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 |
| Attenuation (dB/m) | 0.68 | 0.98 | 1.20 | 1.40 | 1.55 | 1.66 | 2.02 | 2.28 | 2.52 | 2.74 | 2.91 | 3.14 | 4.83 | 6.17 | 8.23 |
| Avg. Power (W) | 250 | 175 | 135 | 110 | 100 | 95 | 78 | 65 | 59 | 54 | 50 | 47 | 37 | 36 | 29 |

C25 Ultra Flexible & Durable .047 Cable Assembly with High Mechanical Strength

Ideal for connection and jumper requiring extremely limited installation space & high reliability

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|--------------------------|
| 1 | Centre conductor | 0.29 | Solid SPC |
| 2 | Dielectric | 0.92 | PTFE |
| 3 | Outer conductor | 1.05 | SPC Strip |
| 4 | Outer shield | 1.13 | High Strength WPCA Braid |
| 5 | Jacket | 1.42 | PPF |

Features & Advantage

- High strength braid structure
- Ultra flexible and durable
- Very stable performance over bending
- Ultra-thin, overall diameter with 1.42mm

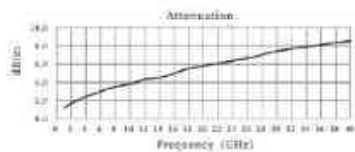
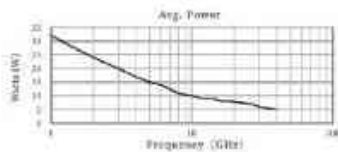
Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: Installation (mm) | 3 |
| Bend Radius: repeated (mm) | 6 |
| Weight (g/m) | ±2 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|--------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | <-150 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 112 |
| Delay Time (ns/m) | 4.76 | Exec. Phase Stability* | ±1°@40GHz |
| Capacitance (pF/m) | 95 | Temp. Phase Stability PPM(±55~+85°C) | 1500 |
| Voltage Withstand (V) | 700 | Amplitude Stability*(dB@1GHz)* | <±0.55 |

* Phase and amplitude stability not certified. (to wrap the cable 360° around a manife) which value is 10 times the cable diameter



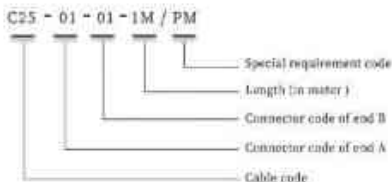
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 1.17 | 1.08 | 1.02 | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Avg. Power (W) | 3.2 | 2.6 | 2.0 | 1.7 | 1.6 | 1.5 | 1.1 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Connector & Assembly Information



Part Numbering Code



*If any one connector requested, one of the connector code can be replaced with 'M'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| th3 | PIM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|---|---|---|---|
|  <p>Type: SMA Male, Tailless P/N: SMAJD-01-00 Code: 011 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-07-00 Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Female P/N: 2.92-F-03-00 Code: 46 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female P/N: SMP-F-01-00 Code: J7 Mat.: Brass Freq.: 40GHz VSWR: 1.35:1</p> |
|  <p>Type: SMP Female RA P/N: SMP-KW-02-00 Code: 380 Mat.: Brass Freq.: 26.5GHz VSWR: 1.35:1</p> |  <p>Type: SSMP Female RA P/N: SSMP-KW-02-00 Code: 86 Mat.: Brass Freq.: 40GHz VSWR: 1.65:1</p> |  <p>Type: SSMP F Bulkhead P/N: SSMP-KY-02-00 Code: 03. Mat.: Brass Freq.: 40GHz VSWR: 1.45:1</p> |  <p>Type: MCX Male P/N: MCX-J-01-00 Code: 27 Mat.: Brass Freq.: 12GHz VSWR: 1.20:1</p> |

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|------------------|----------------|---------------|-------------|---------------------------------|------|---------|---------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | DC-6 | 6-12 | 12-26.5 | 26.5-40 | DC-6 | 6-12 | 12-26.5 | 26.5-40 |
| | | | | GHz | | | | GHz | | | |
| C25-011-011-0.2M | SMA Male | SMA Male | 0.2 | 0.8 | 1.2 | 1.9 | 1.15 | 1.20 | 1.30 | | |
| C25-011-011-0.3M | SMA Male | SMA Male | 0.3 | 1.1 | 1.7 | 2.5 | 1.15 | 1.20 | 1.30 | | |
| C25-011-011-0.3M | SMA Male | SMA Male | 0.5 | 1.0 | 2.6 | 4.0 | 1.15 | 1.20 | 1.30 | | |
| C25-27-27-0.2M | MCX Male | MCX Male | 0.2 | 0.8 | 1.2 | | 1.20 | 1.25 | | | |
| C25-27-27-0.3M | MCX Male | MCX Male | 0.3 | 1.1 | 1.7 | | 1.20 | 1.25 | | | |
| C25-27-27-0.5M | MCX Male | MCX Male | 0.5 | 1.0 | 2.6 | | 1.20 | 1.25 | | | |
| C25-57-57-0.2M | SMP Female | SMP Female | 0.2 | 0.8 | 1.2 | 1.9 | 1.15 | 1.25 | 1.35 | | |
| C25-57-57-0.3MH | SMP Female | SMP Female | 0.2 | 0.8 | 1.2 | 1.9 | 2.0 | 1.15 | 1.25 | 1.40 | |
| C25-57-57-0.3M | SMP Female | SMP Female | 0.2 | 1.1 | 1.7 | 2.6 | | 1.15 | 1.25 | 1.35 | |
| C25-57-57-0.3MH | SMP Female | SMP Female | 0.2 | 1.1 | 1.7 | 2.6 | 3.5 | 1.15 | 1.25 | 1.30 | |
| C25-57-57-0.5M | SMP Female | SMP Female | 0.5 | 1.0 | 2.6 | 4.0 | | 1.15 | 1.25 | 1.35 | |
| C25-57-57-0.5MH | SMP Female | SMP Female | 0.5 | 1.0 | 2.6 | 4.0 | 3.2 | 1.15 | 1.25 | 1.35 | |
| C25-27-30-0.2M | SMP Female | SMP Female RA | 0.2 | 0.8 | 1.2 | 1.9 | | 1.15 | 1.25 | 1.40 | |
| C25-27-30-0.3M | SMP Female | SMP Female RA | 0.3 | 1.1 | 1.7 | 2.6 | | 1.15 | 1.25 | 1.40 | |
| C25-57-30-0.2M | SMP Female | SMP Female RA | 0.2 | 0.8 | 1.2 | 1.9 | | 1.15 | 1.25 | 1.40 | |
| C25-57-30-0.3M | SMP Female | SMP Female RA | 0.3 | 1.1 | 1.7 | 2.6 | | 1.15 | 1.25 | 1.40 | |
| C25-27-30-0.5M | SMP Female | SMP Female RA | 0.5 | 1.0 | 2.6 | 4.0 | | 1.15 | 1.25 | 1.40 | |



C25F Ultra Flexible & Low Loss .047 Cable Assembly with High Mechanical Strength

Ideal for connection and jumper requiring extremely limited installation space & high reliability

Construction



| Description | Diameter (mm) | Material |
|--------------------|---------------|-------------|
| 1 Center conductor | 0.32 | Solid SPC |
| 2 Dielectric | 0.91 | Foamed PTFE |
| 3 Outer conductor | 1.05 | SPC Strip |
| 4 Outer shield | 1.17 | SPC Braid |
| 5 Jacket | 1.42 | PEP |

Features & Advantage

- PTFE foaming medium, low loss
- Ultra flexible and durable, stable performance
- Excellent phase stability over flexure & temperature
- High mechanical strength

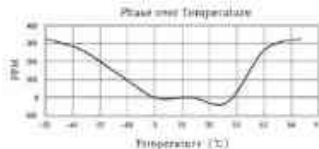
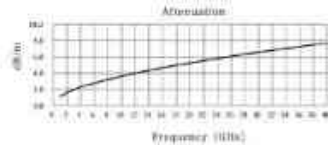
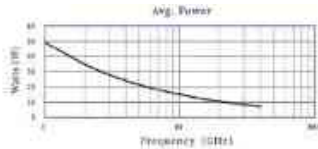
Mechanical & Environmental

| | |
|---------------------------------|------------|
| Bend Radius (installation) (mm) | 3 |
| Bend Radius (operated) (mm) | 6 |
| Weight (g/m) | 5.5 |
| Temp. Operating (°C) | -65 ~ +150 |

Electrical

| | | | |
|-----------------------------|------|---|--------------|
| Impedance (Ohms) | 50 | Shielding Effectiveness (dB) | < 100 |
| Velocity of Propagation (%) | 98.7 | Cut-Off Frequency (GHz) | 143 |
| Delay Time (ns/m) | 4.24 | Flex. Phase Stability* | ±0.06°/Cycle |
| Capacitance (pF/m) | 88.2 | Temp. Phase Stability PPM (-60 ~ +90°C) | ±80 |
| Voltage Withstand (V) | 750 | Amplitude Stability (dB/10GHz)* | ±0.05 |

* Phase and amplitude stability test method: see www.srfsteleinfra.com for detailed test methods which include the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

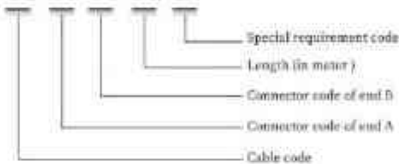
| | | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 | 40 | 50 | 67 |
| Attenuation (dB/m) | 1.10 | 1.57 | 1.90 | 2.23 | 2.52 | 2.77 | 3.22 | 3.62 | 3.99 | 4.33 | 4.66 | 4.96 | 5.12 | 6.55 | 7.69 | 8.71 | 10.3 |
| Avg. Power (W) | 49.3 | 34.6 | 29.1 | 24.2 | 21.5 | 19.6 | 16.9 | 15 | 13.0 | 12.5 | 11.6 | 11 | 8.9 | 6.2 | 4.1 | 6.5 | 5.02 |

Connector & Assembly Information



Part Numbering Code

C25F - 01 - 01 - 1M / PM



*Only one connector required, one of the connector code can be replaced with BR

| Code N | Special Requirement |
|--------|---|
| PM | Phase Match |
| B | Banding |
| BT | PTM Test |
| DE | Duty Line |
| WA | Interlocked Stainless Steel Armor |
| VA | [Armor with PU(PVC) Jacket over Stainless Steel Braid & Spiral] |
| SA | Sylux braid |
| M | Water Proof |

Connector Code

| | | | | |
|---|--|---|--|--|
| <p>Type: SMA Male Tailless P/N: SMA-01-01-00 Code: 011 Mat: Stainless steel Freq: 26.5GHz VSWR: 1.30:1</p> | <p>Type: 2.92 Male P/N: 2.92-01-01-00 Code: 40 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: 2.92 Male P/N: 2.92-01-04-00 Code: 400 Mat: Brass body with stainless steel nut Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: 2.92 Female P/N: 2.92-K01-00 Code: 40 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: 2.92 F Bulkhead P/N: 2.92-EK-01-00 Code: 47 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> |
| <p>Type: 2.4 Male P/N: 2-4-11-00 Code: 39 Mat: Brass body with stainless steel nut Freq: 50GHz VSWR: 1.30:1</p> | <p>Type: 2.4 Male P/N: 2-4-10-00 Code: 39 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: 2.4 Female P/N: 2-4-K01-00 Code: 48 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: 2.4 F Bulkhead P/N: 2-4-EK-01-00 Code: 55 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: SMP Male P/N: SMP-K-01-00 Code: 37 Mat: Brass Freq: 40GHz VSWR: 1.35:1</p> |
| <p>Type: SMP Female P/N: SMP-K-01-00 Code: 37 Mat: Brass Freq: 40GHz VSWR: 1.35:1</p> | <p>Type: SMP Female RA P/N: SMP-KW-00-00 Code: 382 Mat: Brass Freq: 26.5GHz VSWR: 1.30:1</p> | <p>Type: SMP Female RA P/N: SMP-KW-02-00 Code: 38 Mat: Brass Freq: 40GHz VSWR: 1.45:1</p> | <p>Type: SMP Male RA P/N: SMP-KW-01-00 Code: 38C Mat: Brass Freq: 40GHz VSWR: 1.35:1</p> | <p>Type: 1.62:1 Male P/N: 162-1-01-00 Code: 3C Mat: Brass Freq: 40GHz VSWR: 1.26:1</p> |
| <p>Type: 1.62:1 Female P/N: 162-1-01-00 Code: 3D Mat: Brass Freq: 40GHz VSWR: 1.30:1</p> | <p>Type: MCX Male P/N: MCX-1-01-00 Code: 27 Mat: Brass Freq: 12GHz VSWR: 1.20:1</p> | <p>Type: SSMP Female P/N: SSMP-E-21-00 Code: 240 Mat: Brass Freq: 40GHz VSWR: 1.35:1</p> | <p>Note: Customized connectors are available on request</p> | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length mm | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-------------------|----------------|---------------|--------------|---------------------------------|------|---------|-----------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | 0-10 | 0-12 | 12-16.4 | 16.4-19.9 | 20-24 | 0-11 | 11-26.5 | 26.5-40 |
| C25F-011-011-0.1M | SMA Male | SMA Male | 6.2 | 0.8 | 1.1 | 1.7 | | 1.15 | 1.30 | 1.30 | |
| C25F-011-011-0.3M | SMA Male | SMA Male | 8.5 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.30 | 1.30 | |
| C25F-011-011-0.5M | SMA Male | SMA Male | 8.5 | 1.7 | 2.4 | 3.0 | | 1.15 | 1.30 | 1.30 | |
| C25F-01-27-0.2M | MCX Male | MCX Male | 6.2 | 0.8 | 1.1 | | | 1.20 | 1.25 | | |
| C25F-01-27-0.3M | MCX Male | MCX Male | 6.5 | 1.1 | 1.3 | | | 1.20 | 1.25 | | |
| C25F-01-27-0.5M | MCX Male | MCX Male | 6.5 | 1.7 | 2.4 | | | 1.20 | 1.25 | | |
| C25F-01-07-0.1M | SMP Female | SMP Female | 6.2 | 0.6 | 1.1 | 1.7 | | 1.15 | 1.25 | | |
| C25F-01-07-0.3M | SMP Female | SMP Female | 6.2 | 0.6 | 1.1 | 1.7 | 2.1 | 1.15 | 1.20 | 1.40 | |
| C25F-01-07-0.5M | SMP Female | SMP Female | 6.2 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | | |
| C25F-01-07-0.8M | SMP Female | SMP Female | 6.5 | 1.1 | 1.2 | 2.3 | 2.9 | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.1M | SMP Female | SMP Female | 6.5 | 1.7 | 2.1 | 2.6 | | 1.15 | 1.25 | | |
| C25F-01-07-0.3M | SMP Female | SMP Female | 6.5 | 1.7 | 2.4 | 3.0 | 4.3 | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.5M | SMP Female | SMP Female | 6.5 | 1.7 | 2.4 | 3.0 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.8M | SMP Female | SMP Female | 6.5 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.1M | SMP Female | SMP Female RA | 6.2 | 0.6 | 1.1 | 1.7 | | 1.15 | 1.25 | | |
| C25F-01-07-0.3M | SMP Female | SMP Female RA | 6.2 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.5M | SMP Female | SMP Female RA | 6.2 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.8M | SMP Female | SMP Female RA | 6.2 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.1M | SMP Female RA | SMP Female RA | 6.2 | 0.8 | 1.1 | 1.7 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.3M | SMP Female RA | SMP Female RA | 6.2 | 1.1 | 1.3 | 2.3 | | 1.15 | 1.25 | 1.40 | |
| C25F-01-07-0.5M | SMP Female RA | SMP Female RA | 6.2 | 1.7 | 2.4 | 3.0 | | 1.15 | 1.25 | 1.40 | |

C25L Ultra Flexible & Durable .047 Cable Assembly

Very stable performance over flexure, ideal for connection and jumper requiring extremely limited installation space & high reliability

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-----------|
| 1 | Center conductor | 0.29 | Solid SPC |
| 2 | Dielectric | 0.92 | FEP |
| 3 | Outer conductor | 1.03 | SPC Strip |
| 4 | Outer shield | 1.17 | SPC Braid |
| 5 | Jacket | 1.42 | FEP |

Features & Advantage

- Ultra flexible and durable
- High shielding effectiveness
- Very stable performance over bending

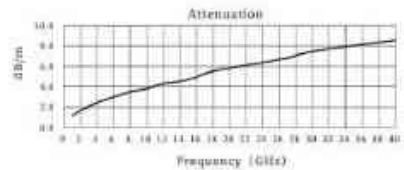
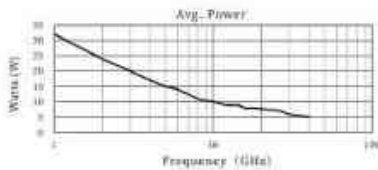
Mechanical & Environmental

| | |
|-------------------------------|-----------|
| Bend Radius Installation (mm) | 4 |
| Bend Radius repeated (mm) | 6 |
| Weight (g/m) | 5.2 |
| Temp. Operating (°C) | 45 ~ +125 |

Electrical

| | | | |
|----------------------------|------|--------------------------------------|------------|
| Impedance (Ohms) | 53 | Shielding Effectiveness(dB) | <-100 |
| Velocity of Propagation(%) | 70 | Cut Off Frequency(GHz) | 112 |
| Delay Time (ns/m) | 4.76 | Flex. Phase Stability* | ±1°/100GHz |
| Capacitance (pF/m) | 93 | Temp. Phase Stability PPM(±50~+10°C) | 1000 |
| Voltage Withstand (V) | 750 | Amplitude Stability*(dB/100Hz)* | <-±0.05 |

* Phase and amplitude stability test method: Insert the cable into a connector which radius is 10 times the cable diameter



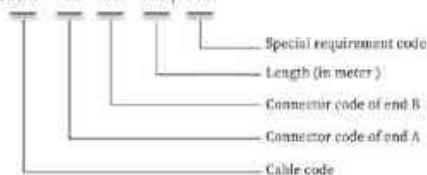
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 | 50 |
| Attenuation (dB/m) | 1.17 | 1.58 | 2.08 | 2.42 | 2.72 | 3.00 | 3.51 | 3.83 | 4.30 | 4.51 | 4.96 | 5.51 | 6.74 | 7.44 | 8.57 | 9.95 |
| Avg. Power (W) | 32 | 24 | 20 | 17 | 15 | 14 | 13 | 10 | 9 | 9 | 8 | 8 | 7 | 6 | 5 | 4.3 |



Part Numbering Code

C25L - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with '0'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DE | Delay Line |
| WA | Washed/Stainless Steel Armor |
| VA | Armor with PU/PVC jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|---|---|---|---|
|  <p>Type: SMA Male P/N: SMA-J0-01-00 Code: 011 Mat. Stainless steel Freq. 26-50GHz VSWR: 1.25:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-07-00 Code: 40 Mat. Stainless steel Freq. 40GHz VSWR: 1.50:1</p> |  <p>Type: 2.92 Female P/N: 2.92-K-01-00 Code: 46 Mat. Stainless steel Freq. 40GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female P/N: SMP-J-01-00 Code: 37 Mat. Brass Freq. 40GHz VSWR: 1.35:1</p> |
|  <p>Type: SMP Female RA P/N: SMP-KW-01-00 Code: 280 Mat. Brass Freq. 26-50GHz VSWR: 1.25:1</p> |  <p>Type: SSMP Male P/N: LHM/SSMP-J-0-00 Code: 89 Mat. Brass Freq. 18GHz VSWR: 1.50:1</p> |  <p>Type: SSMP Female RA P/N: SSMP-KW-02-00 Code: 86 Mat. Brass Freq. 40GHz VSWR: 1.45:1</p> |  <p>Type: SSMP F Bulkhead P/N: SSMP-J-Y-02-01 Code: 0X Mat. Brass Freq. 40GHz VSWR: 1.45:1</p> |
|  <p>Type: MCX Male P/N: MCX-J-01-00 Code: 27 Mat. Brass Freq. 110GHz VSWR: 1.20:1</p> | Note: Customized connectors are available on request. | | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation (insertion loss) (dB) | | | | VSWR(1) | | | |
|---------------------|----------------|---------------|-------------|-----------------------------------|------|---------|---------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | DC-3 | 6-12 | 11-24.5 | 26.5-40 | DC-6 | 6-12 | 12-24.5 | 26.5-40 |
| | | | | GHz | | | | dB | | | |
| C25L-011-011-0.25M | SMA Male | SMA Male | 0.7 | 0.8 | 1.2 | 1.9 | 1.13 | 1.20 | 1.28 | | |
| C25L-011-011-0.3M | SMA Male | SMA Male | 0.9 | 1.1 | 1.7 | 2.6 | 1.13 | 1.20 | 1.30 | | |
| C25L-011-011-0.5M | SMA Male | SMA Male | 0.5 | 1.8 | 2.6 | 4.0 | 1.13 | 1.20 | 1.30 | | |
| C25L-07-07-0.25M | MCX Male | MCX Male | 0.2 | 0.8 | 1.2 | 1.7 | 1.20 | 1.25 | | | |
| C25L-07-07-0.3M | MCX Male | MCX Male | 0.3 | 1.1 | 1.7 | 2.6 | 1.20 | 1.25 | | | |
| C25L-07-07-0.5M | MCX Male | MCX Male | 0.5 | 1.8 | 2.6 | 4.0 | 1.20 | 1.25 | | | |
| C25L-07-17-0.25M | SMP Female | SMP Female | 0.2 | 0.8 | 1.2 | 1.9 | 1.13 | 1.20 | 1.28 | | |
| C25L-07-17-0.25M(H) | SMP Female | SMP Female | 0.2 | 0.8 | 1.2 | 1.9 | 2.6 | 1.13 | 1.20 | 1.30 | |
| C25L-07-17-0.3M | SMP Female | SMP Female | 0.3 | 1.1 | 1.7 | 2.6 | 1.13 | 1.20 | 1.25 | | |
| C25L-07-17-0.3M(H) | SMP Female | SMP Female | 0.3 | 1.1 | 1.7 | 2.6 | 3.3 | 1.13 | 1.20 | 1.30 | |
| C25L-07-17-0.5M | SMP Female | SMP Female | 0.5 | 1.8 | 2.6 | 4.0 | 1.13 | 1.20 | 1.25 | 1.40 | |
| C25L-07-17-0.5M(H) | SMP Female | SMP Female | 0.5 | 1.8 | 2.6 | 4.0 | 5.3 | 1.13 | 1.20 | 1.30 | |
| C25L-07-380-0.25M | SMP Female | SMP Female RA | 0.2 | 0.8 | 1.2 | 1.9 | 1.13 | 1.20 | 1.30 | 1.40 | |
| C25L-07-380-0.3M | SMP Female | SMP Female RA | 0.3 | 1.1 | 1.7 | 2.6 | 1.13 | 1.20 | 1.30 | 1.40 | |
| C25L-07-380-0.5M | SMP Female | SMP Female RA | 0.5 | 1.8 | 2.6 | 4.0 | 1.13 | 1.20 | 1.30 | 1.40 | |
| C25L-380-080-0.25M | SMP Female RA | SMP Female RA | 0.2 | 0.8 | 1.2 | 1.9 | 1.13 | 1.20 | 1.30 | 1.40 | |
| C25L-380-080-0.3M | SMP Female RA | SMP Female RA | 0.3 | 1.1 | 1.7 | 2.6 | 1.13 | 1.20 | 1.30 | 1.40 | |
| C25L-380-080-0.5M | SMP Female RA | SMP Female RA | 0.5 | 1.8 | 2.6 | 4.0 | 1.13 | 1.20 | 1.30 | 1.40 | |



C29 Ultra Flexible & Durable .086 Cable Assembly with High Mechanical Strength

Very stable performance over flexure, ideal for applications requiring extremely limited installation space & high reliability

Construction



| Description | Diameter (mm) | Material |
|--------------------|---------------|-------------------------|
| 1 Center conductor | 0.51 | Solid SPC |
| 2 Dielectric | 1.03 | PEP |
| 3 Outer conductor | 1.91 | 33C Strip |
| 4 Outer shield | 2.34 | High Strength SPC Braid |
| 5 Jacket | 2.57 | PEP |

Features & Advantage

- High strength braid
- Very stable performance over bending
- Ultra flexible and durable

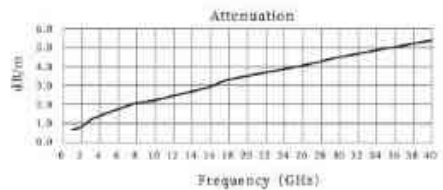
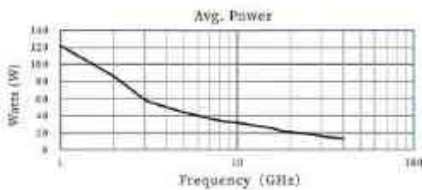
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius, installation (mm) | 7.0 |
| Bend Radius, repeated (mm) | 25.4 |
| Weight (g/m) | 18.36 |
| Temp. Operating (°C) | -55~+125 |

Electrical

| | | | |
|----------------------------|------|---------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | <<-100 |
| Velocity of Propagation(%) | 70 | Cut Off Frequency(GHz) | 62 |
| Delay Time (ns/m) | 4.76 | Flex. Phase Stability* | ±2°@40GHz |
| Capacitance (pF/m) | 95 | Temp. Phase Stability PPM(-55~+125°C) | 1800 |
| Voltage Withstand (V) | 1200 | Amplitude Stability*(dB@14GHz)* | <±0.03 |

* Phase and amplitude stability test method: to strip the cable 30" above a grounded shield which extends 10" above the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

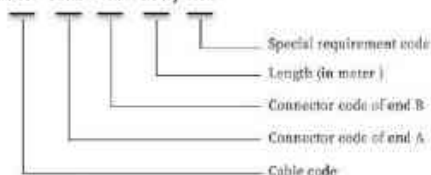
| | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 | 50 |
| Attenuation (dB/m) | 0.66 | 0.81 | 1.19 | 1.48 | 1.76 | 2.07 | 2.22 | 2.46 | 2.68 | 2.95 | 3.31 | 4.10 | 6.30 | 6.38 | 6.31 | |
| Avg. Power (W) | 122 | 86 | 59 | 50 | 44 | 40 | 34 | 32 | 29 | 27 | 25 | 22 | 18 | 16 | 13 | 11 |



Connector & Assembly Information

Part Numbering Code

C29 - 01 - 01 - 1M / PM



**If only one connector requested, one of the connector code can be replaced with '00'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| DM3 | PDM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|---|---|--|---|
|  <p>Type: SMA Male P/N: SMA-J02-04 Code: 01 Mat.: Brass body with stainless steel nut Freq.: 20.5GHz VSWR: 1.20:1</p> |  <p>Type: SMA Male RA P/N: SMA-JW-03-00 Code: 05 Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-03-00A Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Male P/N: 2.4-J-02-00 Code: 50 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |
|  <p>Type: SMP Female P/N: SMP-K-02-00 Code: 37 Mat.: Brass Freq.: 40GHz VSWR: 1.40:1</p> |  <p>Type: SMP Female RA P/N: SMP-KW-02-00 Code: 38 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SSMP Male P/N: SSMP-J-02-00 Code: 08 Mat.: Brass Freq.: 40GHz VSWR: 1.40:1</p> |  <p>Type: SSMP F Bulkhead P/N: SSMP-KV-01-00 Code: 0X Mat.: Brass Freq.: 40GHz VSWR: 1.40:1</p> |

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|--|---|--|-------------|---------------------------------|---------|---------|------|---------|---------|---------|-----|
| | Connector 1 | Connector 2 | | GHz | | | | GHz | | | |
| | | | DC-0 | 0-18 | 18-26.5 | 26.5-40 | DC-6 | 0-18 | 18-26.5 | 26.5-40 | |
| C29-01-01-L | SMA Male | SMA Male | 0.3 | 0.8 | 1.3 | 1.6 | 1.20 | 1.30 | 1.35 | | |
| | | | 0.5 | 1.2 | 2.0 | 2.5 | | | | | |
| | | | 1.0 | 2.1 | 3.7 | 4.5 | | | | | |
| | | | 0.2 | 0.7 | 1.0 | 1.2 | | | | | 1.9 |
| C29-37-37-LC C29-37-38-L(26.5G) C29-38-38-L(26.5G) | SMP Female SMP Female SMP Female RA | SMP Female SMP Female RA SMP Female RA | 0.3 | 0.5 | 1.3 | 1.6 | 1.20 | 1.30 | 1.30 | 1.30 | |
| | | | 0.4 | 1.0 | 1.7 | 2.0 | | | | | 3.0 |
| | | | 0.5 | 1.2 | 2.0 | 2.5 | | | | | 3.5 |
| | | | 1.0 | 2.1 | 3.7 | 4.5 | | | | | 6.2 |
| | | | 2.0 | 3.8 | 7.0 | 8.6 | 11.6 | | | | |

C29H Ultra Flexible and Low Loss .086 Cable Assembly with Excellent Phase Stability over Flexure and Temp.

Ideal for applications requiring extremely limited installation space and high reliability

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|-----------|
| 1 | Center conductor | 0.64 | Solid SPC |
| 2 | Dielectric | 1.89 | PFA |
| 3 | Outer conductor | 1.54 | SPC Strip |
| 4 | Outer shield | 2.18 | SPC Braid |
| 5 | Jacket | 2.27 | PEP |

Features & Advantage

- Ultra flexible and durable
- Ultra low loss
- Velocity of propagation: 98%
- Excellent phase stability over flexure and temperature
- Very stable performance over bending

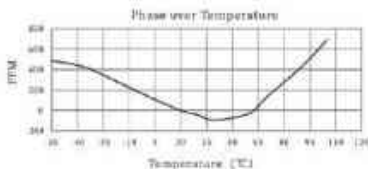
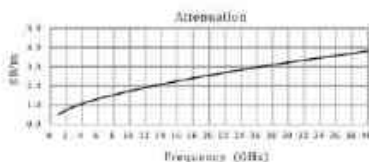
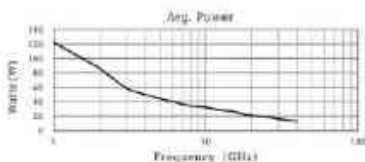
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius: installation (mm) | 5 |
| Bend Radius: repeated (mm) | 10 |
| Weight (g/m) | 15.4 |
| Temp. Operating (°C) | -55~+125 |

Electrical

| | | | |
|----------------------------|------|------------------------------------|------------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < -100 |
| Velocity of Propagation(%) | 98 | Cut-Off Frequency(GHz) | 70 |
| Delay Time (ns/m) | 3.80 | Flex. Phase Stability* | ±5°/900Ghz |
| Capacitance (pF/m) | 77.5 | Temp. Phase Stability PPM(55~85°C) | 300 |
| Voltage Withstand (V) | 1200 | Amplitude Stability* (dB) @ 5GHz* | < ±0.25 |

* Phase and amplitude stability not achieved: 1) wrap the cable 90° around a mandrel which radius is 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

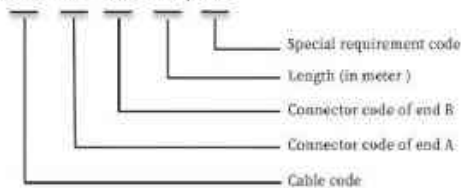
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| Attenuation (dB/m) | 0.51 | 0.73 | 0.91 | 1.06 | 1.19 | 1.32 | 1.54 | 1.74 | 1.92 | 2.09 | 2.25 | 2.41 | 2.60 | 3.22 | 3.81 | 4.53 | |
| Avg. Power (W) | 122 | 85 | 59 | 50 | 44 | 40 | 34 | 32 | 29 | 27 | 25 | 22 | 18 | 16 | 13 | 11 | |

Connector & Assembly Information



Part Numbering Code

C29H - 01 - 01 - 1M / PM



**If only one connector is requested, one of the connector code can be replaced with '0'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| DM3 | PDM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|---|---|---|
|  <p>Type: SMA Male P/N: SMA-J-25-00 Code: 01 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male RA P/N: SMA-JW-05-00 Code: 05 Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-10-00 Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Male P/N: 2.4-J-02-00 Code: 39 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |
|  <p>Type: SMP Female P/N: SMP-K-02-00 Code: 37 Mat.: Brass Freq.: 40GHz VSWR: 1.40:1</p> |  <p>Type: SMP Female RA P/N: SMP-KW-03-00 Code: 38 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SSMP Male P/N: SSMP-J-02-00 Code: 38 Mat.: Brass Freq.: 40GHz VSWR: 1.45:1</p> |  <p>Type: SSMP F Bulkhead P/N: SSMP-KY-01-00 Code: 38 Mat.: Brass Freq.: 40GHz VSWR: 1.45:1</p> |

Note: Customised connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------------|----------------|---------------|-------------|---------------------------------|---------|---------|------|---------|---------|---------|-----|
| | Connector 1 | Connector 2 | | GHz | | | | GHz | | | |
| | | | DC-0 | 0-18 | 18-26.5 | 26.5-40 | DC-6 | 6-18 | 18-26.5 | 26.5-40 | |
| C29H-01-01-L | SMA Male | SMA Male | 0.5 | 0.7 | 1.2 | 1.4 | 1.20 | 1.30 | 1.35 | | |
| | | | 0.5 | 1.0 | 1.7 | 2.8 | | | | | |
| | | | 1.0 | 1.4 | 2.9 | 4.5 | | | | | |
| | | | 0.2 | 0.3 | 0.9 | 1.1 | | | | | 1.5 |
| C29H-07-37-L | SMP Female | SMP Female | 0.5 | 0.7 | 1.2 | 1.4 | 1.20 | 1.30 | 1.35 | 1.35 | |
| | | | 0.4 | 0.9 | 1.5 | 1.7 | | | | | 2.2 |
| | | | 0.5 | 1.0 | 1.7 | 2.8 | | | | | 2.5 |
| | | | 1.0 | 1.4 | 2.9 | 3.3 | | | | | 4.4 |
| C29H-38-38-L(26.5GHz) | SMP Female | SMP Female RA | 0.5 | 0.7 | 1.2 | 1.4 | 1.20 | 1.30 | 1.35 | 1.35 | |
| | | | 1.0 | 1.4 | 2.9 | 3.3 | | | | | 4.4 |

C29F Ultra Flexible & Low Loss .086 Cable Assembly with Excellent Phase Stability over Flexure and Temp.

Ideal for applications requiring extremely limited installation space & high reliability

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|-----------|
| 1 | Center conductor | 0.37 | Solid SPC |
| 2 | Dielectric | 1.62 | PEP |
| 3 | Outer conductor | 1.94 | SPC Strip |
| 4 | Outer shield | 2.11 | BPC Braid |
| 5 | Jacket | 2.54 | PEP |

Features & Advantage

- Ultra flexible and durable
- Low loss
- Excellent phase stability over flexure and temperature
- Very stable performance over bending

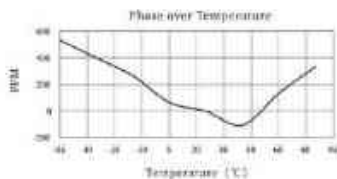
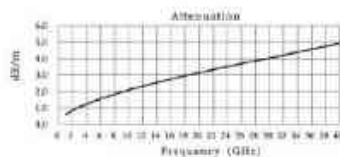
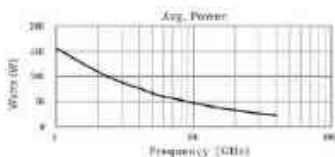
Mechanical & Environmental

| | |
|--------------------------------|----------|
| Bend Radius, installation (mm) | 5 |
| Bend Radius, repeated (mm) | 10 |
| Weight (g/m) | 36.8 |
| Temp. Operating (°C) | -45~+165 |

Electrical

| | | | |
|----------------------------|-------|--------------------------------------|-----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < -100 |
| Velocity of Propagation(V) | 88 | Cut-Off Frequency(GHz) | 70 |
| Delay Time (ns/m) | 4.167 | Flex. Phase Stability* | ±1°@50GHz |
| Capacitance (pF/ft) | 83.3 | Temp. Phase Stability (PPM/40~+70°C) | ±100 |
| Voltage Withstand (V) | 1200 | Amplitude Stability*(dB@18GHz)* | < ±0.04 |

* Phase and amplitude stability test method: In every 100 cable 300' length a minimum stress radius is 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| | | | | | | | | | | | | | | | | | |
|--------------------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 | 50 | 67 |
| Attenuation (dB/m) | 0.58 | 0.86 | 1.09 | 1.23 | 1.41 | 1.56 | 1.84 | 2.09 | 2.20 | 2.34 | 2.35 | 2.35 | 3.24 | 4.07 | 4.90 | 5.71 | 6.20 |
| Avg. Power (W) | 135.7 | 109.1 | 87.6 | 76.1 | 66.2 | 59.8 | 52.8 | 46.5 | 42.3 | 38.8 | 35.9 | 34.1 | 27.5 | 25.5 | 21.9 | 18.9 | 17.4 |

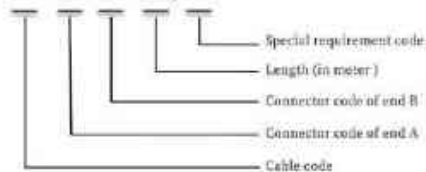


Connector & Assembly Information



Part Numbering Code

C29F - 01 - 01 - 1M / PM



*If only one connector requested, one of the connector code can be replaced with 'X'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DE | Dolby Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|---|---|--|
|  <p>Type: SMA Male RA PN: SMA-JW 05-00 Code: 05 Mat.: Brass body with stainless steel nut Freq.: 35 GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male BA PN: SMA-JW 05-00 Code: 05 Mat.: Brass body with stainless steel nut Freq.: 35 GHz VSWR: 1.25:1</p> |  <p>Type: SMA Female PN: SMA-F 10-00 Code: 05 Mat.: Stainless steel Freq.: 40 GHz VSWR: 1.25:1</p> |  <p>Type: SMA Female RA PN: SMA-F 10-00 Code: 05 Mat.: Stainless steel Freq.: 40 GHz VSWR: 1.25:1</p> |
|  <p>Type: SMA Female PN: 2-4-F-15-00 Code: 01 Mat.: Brass body with stainless steel nut Freq.: 30 GHz VSWR: 1.30:1</p> |  <p>Type: SMA Female PN: 2-4-F-13-00 Code: 48 Mat.: 316L (sea steel) Freq.: 30 GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female PN: 2-4-F-14-00 Code: 01 Mat.: Stainless steel Freq.: 30 GHz VSWR: 1.30:1</p> |  <p>Type: SMA Female PN: 1-85-F-02-00 Code: 0P Mat.: Stainless steel Freq.: 67 GHz VSWR: 1.30:1</p> |
|  <p>Type: SMA Female PN: 1-85-F-01-00 Code: 0Y Mat.: Stainless steel Freq.: 67 GHz VSWR: 1.38:1</p> |  <p>Type: SMA Female PN: SMA-M 04-00 Code: 25 Mat.: Stainless steel Freq.: 35 GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female PN: SMA-M 04-00 Code: 25 Mat.: Stainless steel Freq.: 35 GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female PN: SMA-M 04-00 Code: 25 Mat.: Brass Freq.: 35 GHz VSWR: 1.25:1</p> |
|  <p>Type: SMA Female PN: SMA-F 02-30 Code: 37 Mat.: Brass Freq.: 40 GHz VSWR: 1.40:1</p> |  <p>Type: SMA Female RA PN: SMA-FW 02-00 Code: 38 Mat.: Brass Freq.: 35 GHz VSWR: 1.30:1</p> |  <p>Type: SMA Female PN: SMA-F 02-00 Code: 06 Mat.: Brass Freq.: 40 GHz VSWR: 1.50:1</p> |  <p>Type: SMA Female RA PN: SMA-FW 02-00 Code: 06 Mat.: Brass Freq.: 40 GHz VSWR: 1.30:1</p> |
|  <p>Type: SMA Female PN: SMA-F 01-00 Code: 1A Mat.: Brass Freq.: 40 GHz VSWR: 1.30:1</p> |  <p>Type: SMA Female PN: SMA-F 01-00 Code: 1B Mat.: Brass Freq.: 40 GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female PN: SMA-F 01-00 Code: 1B Mat.: Brass Freq.: 40 GHz VSWR: 1.20:1</p> |  <p>Type: SMA Female RA PN: SMA-FW 01-00 Code: 0X Mat.: Brass Freq.: 40 GHz VSWR: 1.30:1</p> |

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length (m) | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|----------------------|----------------|---------------|------------|---------------------------------|------|---------|---------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | GHz | | | | DC-1 | 1-18 | 18-26.5 | 26.5-40 |
| | | | | DC-1 | 1-18 | 18-26.5 | 26.5-40 | | | | |
| C29F-01-01-1 | SMA Male | SMA Male | 0.3 | 0.8 | 1.3 | 1.7 | 1.20 | 1.30 | 1.35 | | |
| | | | 0.5 | 1.1 | 1.9 | 2.4 | | | | | |
| | | | 1.0 | 1.9 | 3.6 | 4.3 | | | | | |
| | | | 0.2 | 0.6 | 1.0 | 1.2 | | | | | 1.9 |
| C29F-37-37-1 | SMP Female | SMP Female | 0.3 | 0.8 | 1.3 | 1.7 | 1.20 | 1.30 | 1.35 | 1.35 | |
| | | | 0.4 | 1.0 | 1.7 | 2.1 | | | | | 2.7 |
| C29F-37-38-1 (26-50) | SMP Female | SMP Female RA | 0.5 | 1.1 | 1.9 | 2.4 | 2.2 | | | | |
| C29F-38-38-1 (26-50) | SMP Female RA | SMP Female RA | 1.0 | 1.9 | 3.6 | 4.3 | 5.7 | | | | |
| | | | 2.0 | 3.5 | 6.4 | 8.1 | 10.7 | | | | |

C29S Superbend Ultra Flexible & Durable .086 Cable Assembly with High Mechanical Strength

Very stable performance over flexure, ideal for applications requiring extremely limited installation space & high reliability

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|-----------------------|
| 1 | Center conductor | 0.36 | Solid EPC |
| 2 | Dielectric | 1.70 | Low Density PTFE |
| 3 | Outer conductor | 1.85 | EPC Strip |
| 4 | Mobile Layer | 1.98 | Aluminum foil |
| 5 | Outer shield | 2.24 | Stainless Steel Braid |
| 6 | Jacket | 2.64 | FRP |

Features & Advantage

- Low loss and high shielding
- Small bending radius - very stable performance over bending
- Stainless steel braided wire structure, ultra high mechanical strength, divisible and flexural

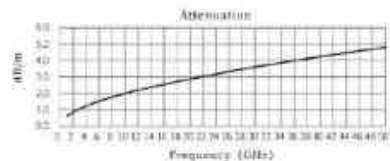
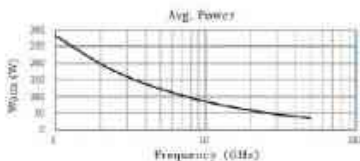
Mechanical & Environmental

| | |
|--------------------------------|---------|
| Bend Radius: installation (mm) | 5 |
| Bend Radius: repeated (mm) | 10 |
| Weight (g/m) | 17 |
| Temp. Operating (°C) | -55→125 |

Electrical

| | | | |
|-----------------------------|------|--------------------------------|----------|
| Impedance (Ohms) | 50 | Shielding Effectiveness (dB) | > 40 |
| Velocity of Propagation (%) | 76 | Cut-Off Frequency (GHz) | 65 |
| Delay Time (ns/m) | 4.5 | Flex. Phase Stability* | ±0.04GHz |
| Capacitance (pF/m) | 90.2 | Amplitude Stability*(dB@1GHz)* | <±0.05 |
| Voltage Withstand (V) | 000 | | |

*Phase and amplitude stability test method: 1000 cycles at 30° around a bend of which radius is 10 times the cable diameter



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

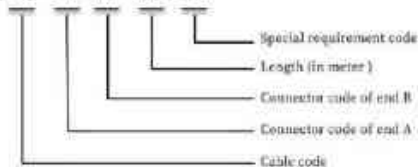
| | | | | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 | 67 | |
| Attenuation (dB/m) | 0.60 | 0.86 | 1.06 | 1.23 | 1.38 | 1.52 | 1.77 | 1.99 | 2.18 | 2.38 | 2.56 | 2.73 | 2.87 | 3.61 | 4.24 | 4.81 | 5.66 | | |
| Avg. Power (W) | 285 | 198 | 160 | 138 | 123 | 112 | 95 | 85 | 77 | 71 | 66 | 62 | 60 | 55 | 51 | 46 | 40 | 35.3 | 31 |

Connector & Assembly Information



Part Numbering Code

C29S - 01 - 01 - 1M / PM



*If only one connector is required, one of the connector code can be replaced with '00'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IMT | IPM Test |
| HE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|---|--|--|---|
|  <p>Type: SMA Male P/N: SMA-JD-02-00 Code: 01 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.20:1</p> |  <p>Type: N Male P/N: N-3-41-00 Code: 07 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 Male P/N: 2.92-JD-01-00 Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Male P/N: 2.4-JD-01-00 Code: 39 Mat.: Stainless steel Freq.: 30GHz VSWR: 1.30:1</p> |
|  <p>Type: SMP Female P/N: SMP-JD-01-00 Code: 27 Mat.: Brass Freq.: 10GHz VSWR: 1.30:1</p> |  <p>Type: SMA Male P/N: SMA-JD-01-00 Code: 25 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMP Male P/N: SMP-JD-01-00 Code: 30 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.35:1</p> |  <p>Type: SMP RA Female P/N: SMP-RV-16-00 Code: 28 Mat.: Brass Freq.: 10GHz VSWR: 1.30:1</p> |
|  <p>Type: 1.85 Male P/N: 1.85-JD-01-00 Code: 0P Mat.: Stainless steel Freq.: 67GHz VSWR: 1.20:1</p> |  <p>Type: 1.85 Female P/N: 1.85-RD-01-00 Code: 0Y Mat.: Stainless steel Freq.: 67GHz VSWR: 1.20:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-15-00 Code: 40B Mat.: Stainless steel Freq.: 40GHz VSWR: 1.00:1</p> |  <p>Type: N Female RH P/N: N-KY-04-00 Code: 09 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1</p> |
|  <p>Type: SMA Male P/N: SMA-J-01-00 Code: 010 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female P/N: SMP-J-01-00 Code: 24 Mat.: Brass Freq.: 10GHz VSWR: 1.35:1</p> |  <p>Type: SMA Female RH P/N: SMA-KYD-01-00 Code: 02 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.00:1</p> |  <p>Type: SMP Male RH P/N: SMP-IVD-02-00P Code: 04PD Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1</p> |
|  <p>Type: TNC Male P/N: TNC-JD-01-00 Code: 11 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.30:1</p> | <p>Note: Customized connectors are available on request</p> | | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length mm | Attenuation Insertion Loss (dB) | | | | VSWR (dBS) | | | |
|----------------|----------------|-------------|--------------|---------------------------------|---------|---------|-------|------------|---------|---------|-------|
| | Connector 1 | Connector 2 | | DC-18 | 17-20.5 | 20.5-40 | 40-50 | DC-18 | 18-20.5 | 20.5-40 | 40-50 |
| C29S-01-01-1M | SMA Male | SMA Male | 0.1 | 0.2 | 0.8 | | | 1.25 | 1.30 | | |
| C29S-01-01-2M | SMA Male | SMA Male | 0.2 | 1.0 | 1.2 | | | 1.25 | 1.30 | | |
| C29S-01-01-3M | SMA Male | SMA Male | 0.3 | 1.3 | 1.2 | | | 1.25 | 1.30 | | |
| C29S-01-01-4M | SMA Male | SMA Male | 0.4 | 1.7 | 0.8 | 1.0 | | 1.20 | 1.25 | 1.30 | |
| C29S-01-01-5M | SMA Male | SMA Male | 0.5 | 2.1 | 1.2 | 1.4 | | 1.20 | 1.20 | 1.20 | |
| C29S-01-01-6M | SMA Male | SMA Male | 0.6 | 2.5 | 1.3 | 1.9 | | 1.20 | 1.25 | 1.30 | |
| C29S-01-01-7M | SMA Male | SMA Male | 0.7 | 3.0 | 1.0 | 1.8 | | 1.20 | 1.20 | 1.25 | 1.30 |
| C29S-01-01-8M | SMA Male | SMA Male | 0.8 | 3.5 | 1.2 | 1.4 | 1.3 | 1.20 | 1.20 | 1.20 | 1.25 |
| C29S-01-01-9M | SMA Male | SMA Male | 0.9 | 4.0 | 1.2 | 1.9 | 2.8 | 1.20 | 1.20 | 1.20 | 1.25 |
| C29S-01-01-10M | SMA Male | SMA Male | 1.0 | 4.5 | 1.2 | 1.4 | 1.8 | 1.20 | 1.20 | 1.20 | 1.25 |
| C29S-01-01-11M | SMA Male | SMA Male | 1.1 | 5.0 | 1.2 | 1.4 | 1.8 | 1.20 | 1.20 | 1.20 | 1.25 |
| C29S-01-01-12M | SMA Male | SMA Male | 1.2 | 5.5 | 1.2 | 1.4 | 1.8 | 1.20 | 1.20 | 1.20 | 1.25 |
| C29S-01-01-13M | SMA Male | SMA Male | 1.3 | 6.0 | 1.2 | 1.4 | 1.8 | 1.20 | 1.20 | 1.20 | 1.25 |



Connectors Available

| | |
|-------------|---------|
| SMA Male | 26.5GHz |
| 2.92mm Male | 40GHz |
| 2.4mm Male | 50GHz |
| SMP Female | 40GHz |
| 1.85mm Male | 67GHz |





E Series --Semi-rigid Cable Assemblies

BENEFITS:

- ★ Compliant with MIL-C-17 spec
- ★ Wideband frequency coverage, DC- 67GHz including .047 cable
- ★ Low loss, low VSWR
- ★ High shielding effectiveness
- ★ Mlcable uses a proprietary computerized bending machine which can form any 3D
« -
- ★ Good phase matching & tracking performance owing to repeatable & consistent performance
- ★ Field measuring & cabling service

APPLICATIONS:

- ★ Base station equipment test
- ★ Electronic countermeasures
- ★ Connection between systems of medical, measurement & wireless communication equipment
- ★ Airborne, ground & sea-based systems, both commercial & military
- ★ High frequency signal transmission

E01 .047 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase matching and tracking are available

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|------------------------------------|
| 1 | Center conductor | 0.25 | Solid SPCW |
| 2 | Dielectric | 0.94 | PTFE |
| 3 | Outer shield | 1.19 | Tin or Tenuary Alloy Plated Copper |

Features & Advantage

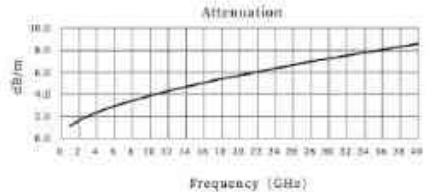
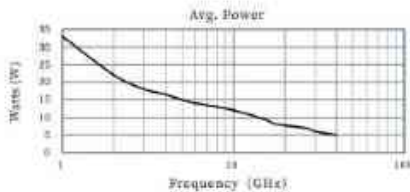
- Compliant with MIL-C-17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|---------------------------------|------------|
| Bend Radius (installation) (mm) | 4.2 |
| Weight (g/m) | 6 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|-----|-----------------------------|-------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | <-125 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 169 |
| Delay Time (ns/m) | 4.7 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 250 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

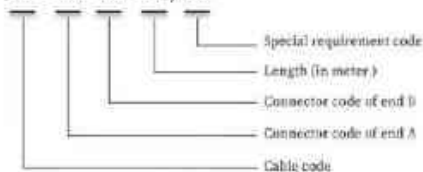
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 | 40 |
| Attenuation (dB/m) | 1.14 | 1.64 | 2.02 | 2.36 | 2.66 | 2.95 | 3.44 | 3.89 | 4.30 | 4.69 | 5.05 | 5.40 | 6.71 | 7.24 | 8.57 |
| Avg. Power (W) | 33 | 22 | 18 | 16.3 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 |

Connector & Assembly Information



Part Numbering Code

E01 - 01 - 01 - 1M / PM



If only one connector requested, one of the connector code can be replaced with 00.

| Code S | Special Requirement |
|--------|---|
| PM | Phase Match |
| B | Brazing |
| IM3 | PM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PUPVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|---|---|---|
|  <p>Type: SMA Male P/N: SMA-J-10-00A Code: 01 Mat.: Brass Freq.: 6GHz VSWR: 1.35:1</p> |  <p>Type: SMA Female P/N: SMA-K-07-00 Code: 02 Mat.: Brass Freq.: 6GHz VSWR: 1.30:1</p> |  <p>Type: SMA Male P/N: SMA-JD-01-00 Code: 01B Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.35:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-07-00 Code: 01 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |
|  <p>Type: 2.92 Female P/N: 2.92-K-03-00 Code: 05 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female P/N: SMP-K-02-00 Code: 07 Mat.: Brass Freq.: 40GHz VSWR: 1.35:1</p> |  <p>Type: SMP Female RA P/N: SMP-KW-03-00 Code: 08 Mat.: Brass Freq.: 40GHz VSWR: 1.35:1</p> | |

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-------------------|----------------|---------------|-------------|---------------------------------|-----|------|---------|---------|------|------|---------|
| | Connector 1 | Connector 2 | | DC-2 | 2-6 | 6-18 | 18-26.5 | DC-3 | 2-6 | 6-18 | 18-26.5 |
| | | | | GHz | | | | GHz | | | |
| E01-01-01-0.5M | SMA Male | SMA Male | 0.5 | 1.2 | 2.0 | | | 1.15 | 1.30 | | |
| E01-01-01-1M | SMA Male | SMA Male | 1.0 | 2.1 | 1.6 | | | 1.15 | 1.30 | | |
| E01-02-02-0.5M | SMP Female | SMP Female | 0.5 | 1.2 | 2.0 | | | 1.15 | 1.30 | | |
| E01-03-03-1M | SMP Female | SMP Female | 1.0 | 2.2 | 1.6 | | | 1.15 | 1.30 | | |
| E01-01B-01B-0.25M | SMA Male | SMA Male | 0.2 | 0.6 | 0.9 | 1.0 | 1.0 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMA Male | SMA Male | 0.5 | 0.9 | 1.2 | 2.1 | 2.7 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.75M | SMA Male | SMA Male | 0.7 | 1.2 | 1.8 | 3.3 | 4.1 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female | SMP Female | 0.5 | 0.6 | 0.9 | 1.0 | 1.0 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female | SMP Female RA | 0.5 | 0.8 | 0.9 | 1.2 | 1.0 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female | SMP Female RA | 0.5 | 0.9 | 1.2 | 2.1 | 2.7 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female | SMP Female RA | 0.5 | 1.2 | 1.8 | 3.3 | 4.1 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female RA | SMP Female RA | 0.5 | 0.6 | 0.9 | 1.0 | 1.0 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female RA | SMP Female RA | 0.5 | 0.8 | 1.2 | 2.1 | 2.7 | 1.12 | 1.15 | 1.20 | 1.21 |
| E01-01B-01B-0.5M | SMP Female RA | SMP Female RA | 0.5 | 1.2 | 1.8 | 3.3 | 4.1 | 1.12 | 1.15 | 1.20 | 1.21 |



E02 .086 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase-matching and tracking are available

Construction



| Description | Diameter(mm) | Material |
|---------------------|--------------|------------------------------------|
| 1. Center conductor | 0.51 | Solid SPCW |
| 2. Dielectric | 1.68 | PTFE |
| 3. Outer shield | 2.20 | Tin or Ternary Alloy Plated Copper |

Features & Advantage

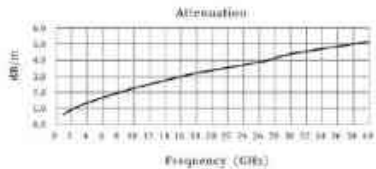
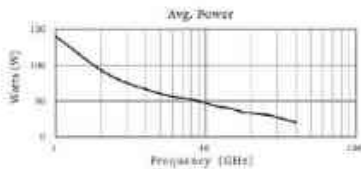
- Compliant with MIL-C-17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 3.2 |
| Weight (g/m) | 21.3 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | <100 |
| Velocity of Propagation(%) | 70 | Cut Off Frequency(GHz) | 40 |
| Delay Time (ns/m) | 4.7 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 1000 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

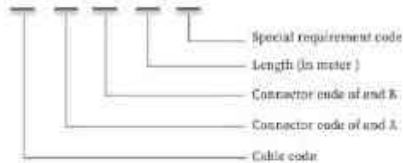
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 | 30 | 40 |
| Attenuation (dB/m) | 0.63 | 0.91 | 1.13 | 1.34 | 1.52 | 1.67 | 1.88 | 2.25 | 2.51 | 2.75 | 2.96 | 3.20 | 3.93 | 4.39 | 5.15 |
| Avg. Power (W) | 140 | 93 | 75 | 66 | 60 | 56 | 52 | 47 | 42 | 40 | 37 | 34 | 30 | 27 | 20 |

Connector & Assembly Information



Part Numbering Code

E02 - 01 - 01 - 1M / PM



**If only one connector requested, one of the connector code can be replaced with 00*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IMT | PIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | |
|--|--|---|
|  <p>Type: SMA Male P/N: SMA-J502-04 Code: 012 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male RA P/N: SMA-JW-05-00 Code: 055 Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 Male P/N: 2.92-J-02-0010 Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |
|  <p>Type: SMP Female P/N: SMP-K-02-00 Code: 371 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female RA P/N: SMP-EW-02-00 Code: 381 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> | <p>Note: Customized connectors are available on request</p> |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length mm | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|------------------|----------------|---------------|--------------|---------------------------------|------|---------|---------|---------|------|---------|-------------|
| | Connector 1 | Connector 2 | | 0°C-6 | 6-18 | 18-26.8 | 26.8-40 | 0°C-6 | 6-18 | 18-26.8 | 26.8-40 GHz |
| E02-012-012-0.1M | SMA Male | SMA Male | 1.1 | 0.9 | 1.2 | 0.8 | | 1.25 | 1.30 | 1.35 | |
| E02-015-017-0.2M | SMA Male | SMA Male | 1.2 | 0.9 | 1.0 | 1.2 | | 1.28 | 1.30 | 1.31 | |
| E02-012-012-0.1M | SMA Male | SMA Male | 1.3 | 0.9 | 1.3 | 1.0 | | 1.24 | 1.30 | 1.31 | |
| E02-015-017-0.4M | SMA Male | SMA Male | 1.4 | 1.0 | 1.1 | 2.0 | | 1.27 | 1.30 | 1.35 | |
| E02-012-012-0.5M | SMA Male | SMA Male | 1.5 | 1.2 | 2.0 | 2.5 | | 1.29 | 1.30 | 1.35 | |
| E02-10-10-0.1M | 2.92 Male | 2.92 Male | 0.1 | 0.5 | 1.7 | 0.8 | 1.3 | 1.11 | 1.30 | 1.35 | 1.40 |
| E02-40-40-0.2M | 1.0 Male | 1.0 Male | 1.2 | 0.9 | 1.0 | 1.2 | 1.3 | 1.21 | 1.30 | 1.35 | 1.40 |
| E02-40-40-0.3M | 1.0 Male | 1.0 Male | 1.3 | 0.9 | 1.3 | 1.0 | 2.1 | 1.15 | 1.30 | 1.35 | 1.40 |
| E02-40-40-0.4M | 1.0 Male | 1.0 Male | 1.4 | 1.0 | 1.4 | 2.0 | 2.3 | 1.15 | 1.30 | 1.35 | 1.40 |
| E02-40-40-0.5M | 1.0 Male | 1.0 Male | 1.5 | 1.1 | 1.8 | 2.3 | 2.3 | 1.15 | 1.30 | 1.35 | 1.40 |
| E02-050-050-0.1M | SMA Male RA | SMA Male RA | 1.1 | 0.9 | 1.0 | | | 1.25 | 1.30 | | |
| E02-015-015-0.2M | SMA Male RA | SMA Male RA | 1.2 | 0.9 | 1.1 | | | 1.27 | 1.30 | | |
| E02-015-015-0.3M | SMA Male RA | SMA Male RA | 1.3 | 0.9 | 1.4 | | | 1.25 | 1.30 | | |
| E02-101-114-0.1M | SMP Female | SMP Female | 1.1 | 0.5 | 1.2 | 0.6 | | 1.29 | 1.30 | 1.35 | |
| E02-101-114-0.2M | SMP Female | SMP Female | 1.2 | 0.6 | 1.0 | 1.2 | | 1.29 | 1.30 | 1.35 | |
| E02-111-074-0.1M | SMP Female | SMP Female | 1.3 | 0.5 | 1.3 | 1.0 | | 1.32 | 1.30 | 1.35 | |
| E02-140-062-0.1M | SMP Female RA | SMP Female RA | 1.1 | 0.5 | 1.2 | 0.6 | | 1.24 | 1.30 | 1.35 | |
| E02-140-062-0.2M | SMP Female RA | SMP Female RA | 1.2 | 0.6 | 1.0 | 1.2 | | 1.28 | 1.30 | 1.35 | |
| E02-140-062-0.3M | SMP Female RA | SMP Female RA | 1.3 | 0.6 | 1.3 | 1.0 | | 1.29 | 1.30 | 1.35 | |

E03 .141 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase matching and tracking are available.

Construction



| Description | Diameter(mm) | Material |
|---------------------|--------------|------------------------------------|
| 1. Center conductor | 0.95 | Solid 50°CW |
| 2. Dielectric | 3.00 | PTFE |
| 3. Outer shield | 3.60 | Tin or Ternary Alloy Plated Copper |

Features & Advantage

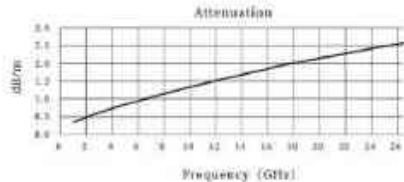
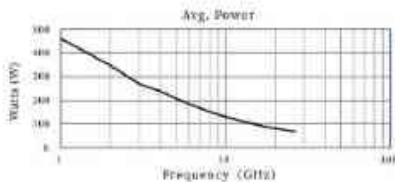
- Compliant with MIL-C-17 spec.
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|-------------------------------|------------|
| Band Radius Installation (mm) | 12.5 |
| Weight (g/m) | 46.4 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | >120 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 34 |
| Delay Time (ns/in) | 4.7 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 1900 | | |



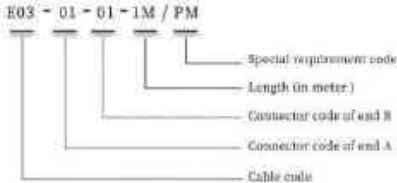
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20.5 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.24 | 0.48 | 0.72 | 0.96 | 1.20 | 1.44 | 1.92 | 2.40 | 2.88 | 3.36 | 3.84 | 4.32 | 5.28 |
| Avg. Power (W) | 460 | 340 | 270 | 229 | 207 | 185 | 132 | 113 | 116 | 104 | 93 | 87 | 60 |

Connector & Assembly Information



Part Numbering Code




*If only one connector required, one of the connector code can be replaced with '0'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bentling |
| IMJ | ISM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| W | Water Proof |

Connector Code

| | |
|---|---|
|  | Type: SMA Male PN: SMA-JS03-02 Code: 012 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.25:1 |
|---|---|

| | |
|---|--|
|  | Type: SMA Male RA PN: SMA-JW06-09 Code: 055 Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.20:1 |
|---|--|

| | |
|---|---|
|  | Type: N Male PN: N-J-02-00A Code: 01 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.25:1 |
|---|---|

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|------------------|----------------|-------------|-------------|---------------------------------|-------|------|---------|---------|-------|------|---------|
| | Connector 1 | Connector 2 | | DC-2.4 | 2.4-6 | 6-18 | 18-26.5 | DC-2.4 | 2.4-6 | 6-18 | 18-26.5 |
| E03-011-012-0.1M | SMA Male | SMA Male | 0.1 | 0.3 | 0.4 | 0.5 | 0.7 | 1.15 | 1.20 | 1.20 | 1.25 |
| E03-012-012-0.2M | SMA Male | SMA Male | 0.2 | 0.3 | 0.5 | 0.8 | 0.9 | 1.15 | 1.20 | 1.20 | 1.25 |
| E03-011-012-0.3M | SMA Male | SMA Male | 0.3 | 0.4 | 0.6 | 1.0 | 1.3 | 1.15 | 1.20 | 1.20 | 1.25 |
| E03-012-012-0.4M | SMA Male | SMA Male | 0.4 | 0.5 | 0.7 | 1.2 | 1.5 | 1.15 | 1.20 | 1.20 | 1.25 |
| E03-012-012-0.5M | SMA Male | SMA Male | 0.5 | 0.5 | 0.8 | 1.4 | 1.8 | 1.15 | 1.20 | 1.20 | 1.25 |
| E03-056-056-0.1M | SMA RA Male | SMA RA Male | 0.1 | 0.4 | 0.5 | 0.7 | | 1.20 | 1.25 | 1.25 | |
| E03-056-056-0.2M | SMA RA Male | SMA RA Male | 0.2 | 0.5 | 0.7 | 0.9 | | 1.20 | 1.25 | 1.25 | |
| E03-056-056-0.3M | SMA RA Male | SMA RA Male | 0.3 | 0.5 | 0.7 | 1.1 | | 1.20 | 1.25 | 1.25 | |
| E03-056-056-0.4M | SMA RA Male | SMA RA Male | 0.4 | 0.5 | 0.8 | 1.3 | | 1.20 | 1.25 | 1.25 | |
| E03-056-056-0.5M | SMA RA Male | SMA RA Male | 0.5 | 0.6 | 0.9 | 1.5 | | 1.20 | 1.25 | 1.25 | |
| E03-07-07-0.1M | N Male | N Male | 0.1 | 0.3 | 0.4 | 0.6 | | 1.15 | 1.20 | 1.25 | |
| E03-07-07-0.2M | N Male | N Male | 0.2 | 0.3 | 0.5 | 0.8 | | 1.15 | 1.20 | 1.25 | |
| E03-07-07-0.3M | N Male | N Male | 0.3 | 0.4 | 0.8 | 1.0 | | 1.15 | 1.20 | 1.25 | |
| E03-07-07-0.4M | N Male | N Male | 0.4 | 0.5 | 0.7 | 1.2 | | 1.15 | 1.20 | 1.25 | |
| E03-07-07-0.5M | N Male | N Male | 0.5 | 0.5 | 0.8 | 1.4 | | 1.15 | 1.20 | 1.25 | |

E04 .250 Semi-rigid Cable Assembly

High-end application components such as high frequency low loss, 3D bending, phase matching and tracking are available.

Construction



| | Description | Diameter(mm) | Material |
|---|-----------------|--------------|------------------------------------|
| 1 | Outer conductor | 1.63 | Solid 99.99% Cu |
| 2 | Dielectric | 5.31 | PTFE |
| 3 | Outer shield | 6.35 | Tin or Ternary Alloy Plated Copper |

Features & Advantage

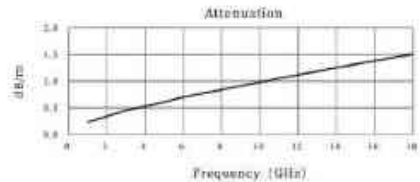
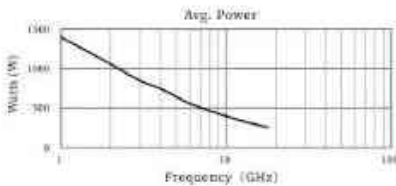
- Compliant with MIL-C-17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 22.2 |
| Weight (g/m) | 155.8 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|--------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < -120 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 19 |
| Delay Time (ns/m) | 4.7 | Capacitance (pF/m) | 83 |
| Voltage Withstand (V) | 3500 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

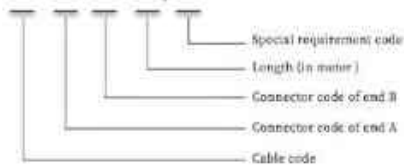
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 18 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.33 | 0.34 | 0.48 | 0.52 | 0.61 | 0.70 | 0.84 | 0.98 | 1.12 | 1.25 | 1.38 | 1.38 |
| Avg. Power (W) | 1400 | 1053 | 850 | 748 | 645 | 566 | 467 | 399 | 350 | 311 | 284 | 280 |

Connector & Assembly Information



Part Numbering Code

E04 - 01 - 01 - 1M / PM



**If only one connector requested, one of the connector code can be replaced with '00'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PIM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spinal |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Type SMA Male
P/N SMA-T-05-00
Code 01
Mat. Brass
Freq. 18GHz
VSWR 1.25:1



Type N Male
P/N N-J-05-00
Code 07
Mat. Brass
Freq. 18GHz
VSWR 1.25:1



Type L29 Male
P/N L29-J504-01
Code 49
Mat. Brass
Freq. 60GHz
VSWR 1.20:1

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|----------------|----------------|-------------|-------------|---------------------------------|----------------|--------------|----------------|----------------|----------------|--------------|----------------|
| | Connector 1 | Connector 2 | | 10-12.5 GHz | 12.5-16 GHz | 16-18 GHz | 18-20.5 GHz | 10-12.5 GHz | 12.5-16 GHz | 16-18 GHz | 18-20.5 GHz |
| E04-01-01-0.1M | SMA Male | SMA Male | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-01-0.2M | SMA Male | SMA Male | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-01-0.3M | SMA Male | SMA Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.4 | 0.6 | 0.7 | 1.0 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-01-0.7M | SMA Male | SMA Male | 0.7 | 0.5 | 0.7 | 0.9 | 1.2 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-01-0.1M | N Male | N Male | 0.1 | 0.3 | 0.3 | 0.4 | 0.6 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-07-0.1M | N Male | N Male | 0.2 | 0.2 | 0.4 | 0.3 | 0.7 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-07-0.3M | N Male | N Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-07-0.5M | N Male | N Male | 0.5 | 0.4 | 0.6 | 0.7 | 1.0 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-01-07-0.7M | N Male | N Male | 0.7 | 0.5 | 0.7 | 0.9 | 1.2 | 1.15 | 1.20 | 1.25 | 1.25 |
| E04-49-49-0.1M | L29 Male | L29 Male | 0.1 | 0.3 | 0.3 | | | 1.20 | 1.25 | | |
| E04-49-49-0.2M | L29 Male | L29 Male | 0.2 | 0.4 | 0.4 | | | 1.20 | 1.25 | | |
| E04-49-49-0.3M | L29 Male | L29 Male | 0.3 | 0.4 | 0.5 | | | 1.20 | 1.25 | | |
| E04-49-49-0.5M | L29 Male | L29 Male | 0.5 | 0.4 | 0.6 | | | 1.20 | 1.25 | | |
| E04-49-49-0.7M | L29 Male | L29 Male | 0.7 | 0.5 | 0.7 | | | 1.20 | 1.25 | | |

E05 Low Loss .086 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase matching and tracking are available

Construction



| Description | Diameter (mm) | Material |
|---------------------|---------------|-----------------------------------|
| 1. Center conductor | 0.56 | 400TSPCW |
| 2. Dielectric | 1.48 | Low density PTFE |
| 3. Outer shield | 2.38 | Tin or Tin/ni Alloy Plated Copper |

Features & Advantage

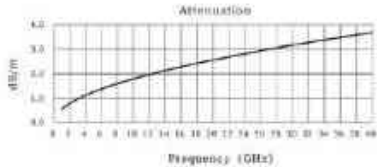
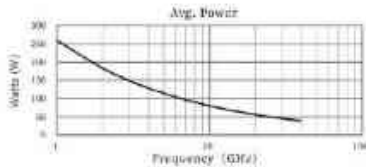
- Compliant with MIL-C-17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|---------------------------------|-------------|
| Braid Finish: installation (mm) | 7 |
| Weight (g/m) | 19 |
| Temp. Operating (°C) | -55 to +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|-------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | < 120 |
| Velocity of Propagation(%) | 77 | Cut-Off Frequency(GHz) | 64 |
| Delay Time (ns/m) | 4.3 | Capacitance (pF/m) | 88 |
| Voltage Withstand (V) | 1400 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

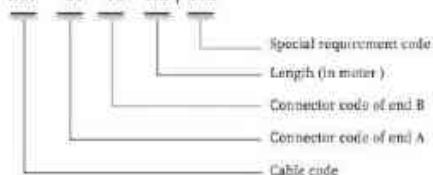
| | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 |
| Attenuation (dB/m) | 0.50 | 0.78 | 0.96 | 1.11 | 1.23 | 1.37 | 1.59 | 1.78 | 1.96 | 2.12 | 2.28 | 2.42 | 2.56 | 2.96 | 3.26 | 3.58 |
| Avg. Power (W) | 200 | 143 | 110 | 90 | 80 | 75 | 65 | 58 | 52 | 48 | 45 | 42 | 40 | 35 | 32 | 28 |

Connector & Assembly Information



Part Numbering Code

ED5 - 01 - 01 - 1M / PM



*If only one connector required, one of the connector code can be replaced with '00'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| DM | DM Test |
| DX | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| SA | Braid Braid |
| M | Water Proof |

Connector Code

| | |
|--|---|
|  | Type: SMA Male P/N: SMA-J503-04 Code: 01 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.25:1 |
|--|---|

| | |
|---|---|
|  | Type: SMA Male RA P/N: SMA-JW-05-00A Code: 051 Mat.: Brass body with stainless steel nut Freq.: 18GHz VSWR: 1.30:1 |
|---|---|

| | |
|---|--|
|  | Type: 2.92 Male P/N: 2.92-J-02-00H Code: 40 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1 |
|---|--|

| | |
|--|---|
|  | Type: SMP Female P/N: SMP-U-03-00 Code: 57 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1 |
|--|---|

| | |
|---|--|
|  | Type: SMP Female RA P/N: SMP-KW-03-00 Code: 382 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1 |
|---|--|

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|------------------|----------------|---------------|-------------|---------------------------------|---------|---------|---------|---------|---------|---------|---------|
| | Connector 1 | Connector 2 | | 0.0-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-5.0 | 0.0-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-5.0 |
| ED5-01-01-0.1M | SMA Male | SMA Male | 0.1 | 0.4 | 0.2 | 0.8 | | 1.20 | 1.30 | | 1.30 |
| ED5-01-01-0.3M | SMA Male | SMA Male | 0.2 | 0.5 | 0.3 | 1.3 | | 1.20 | 1.30 | 1.35 | |
| ED5-01-01-0.5M | SMA Male | SMA Male | 0.3 | 0.6 | 0.3 | 1.4 | | 1.20 | 1.30 | 1.35 | |
| ED5-01-01-0.43M | SMA Male | SMA Male | 0.4 | 0.8 | 0.4 | 1.7 | | 1.20 | 1.30 | 1.35 | |
| ED5-01-01-0.5M | SMA Male | SMA Male | 0.5 | 0.9 | 0.7 | 2.0 | | 1.20 | 1.30 | 1.35 | |
| ED5-01-01-0.1M | 2.92 Male | 2.92 Male | 0.1 | 0.4 | 0.2 | 0.8 | 1.1 | 1.15 | 1.20 | 1.30 | 1.35 |
| ED5-01-01-0.3M | 2.92 Male | 2.92 Male | 0.2 | 0.5 | 0.3 | 1.1 | 1.15 | 1.15 | 1.20 | 1.30 | 1.35 |
| ED5-01-01-0.5M | 2.92 Male | 2.92 Male | 0.3 | 0.6 | 0.4 | 1.4 | 1.15 | 1.15 | 1.20 | 1.30 | 1.35 |
| ED5-01-01-0.43M | 2.92 Male | 2.92 Male | 0.4 | 0.8 | 0.4 | 1.7 | 1.15 | 1.15 | 1.20 | 1.30 | 1.35 |
| ED5-01-01-0.5M | 2.92 Male | 2.92 Male | 0.5 | 0.9 | 0.7 | 2.0 | 1.15 | 1.15 | 1.20 | 1.30 | 1.35 |
| ED5-01-051-0.1M | SMA Male RA | SMA Male RA | 0.1 | 0.4 | 0.2 | 0.8 | | 1.20 | 1.30 | | |
| ED5-01-051-0.3M | SMA Male RA | SMA Male RA | 0.2 | 0.5 | 0.3 | 1.3 | | 1.20 | 1.30 | 1.35 | |
| ED5-01-051-0.5M | SMA Male RA | SMA Male RA | 0.3 | 0.6 | 0.4 | 1.7 | | 1.20 | 1.30 | 1.35 | |
| ED5-17-27-0.1M | SMP Female | SMP Female | 0.1 | 0.4 | 0.2 | 0.8 | | 1.20 | 1.30 | 1.35 | |
| ED5-17-27-0.3M | SMP Female | SMP Female | 0.2 | 0.5 | 0.3 | 1.3 | | 1.20 | 1.30 | 1.35 | |
| ED5-17-27-0.5M | SMP Female | SMP Female | 0.3 | 0.6 | 0.4 | 1.7 | | 1.20 | 1.30 | 1.35 | |
| ED5-242-242-0.1M | SMP Female RA | SMP Female RA | 0.1 | 0.4 | 0.2 | 0.8 | | 1.20 | 1.30 | 1.40 | |
| ED5-242-242-0.3M | SMP Female RA | SMP Female RA | 0.2 | 0.5 | 0.3 | 1.3 | | 1.20 | 1.30 | 1.40 | |
| ED5-242-242-0.5M | SMP Female RA | SMP Female RA | 0.3 | 0.6 | 0.4 | 1.7 | | 1.20 | 1.30 | 1.40 | |

E06 Low Loss .141 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase matching and tracking are available

Construction



| | Description | Diameter (mm) | Material |
|---|------------------|---------------|------------------------------------|
| 1 | Center conductor | 1.02 | Solid SPCW |
| 2 | Dielectric | 2.95 | Low density PTFE |
| 3 | Outer shield | 3.60 | Tin or Ternary Alloy Plated Copper |

Features & Advantage

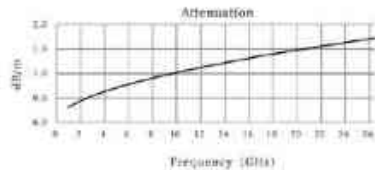
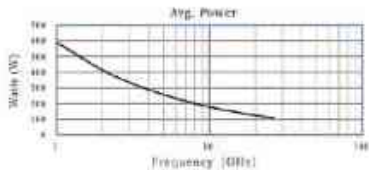
- Compliant with MIL-C-17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|--------------------------------|---------|
| Band Radius, installation (mm) | 20 |
| Weight (g/m) | 42 |
| Temp. Operating (°C) | 55 +125 |

Electrical

| | | | |
|-----------------------------|------|------------------------------|-------|
| Impedance (Ohms) | 50 | Shielding Effectiveness (dB) | < 120 |
| Velocity of Propagation (%) | 77 | Cut-Off Frequency (GHz) | 26 |
| Delay Time (ns/m) | 4.3 | Capacitance (pF/m) | 67 |
| Voltage Withstand (V) | 1800 | | |



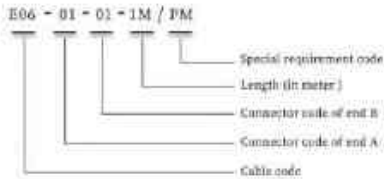
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| | | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26.3 |
| Attenuation (dB/m) | 0.21 | 0.41 | 0.54 | 0.63 | 0.71 | 0.78 | 0.91 | 1.02 | 1.12 | 1.22 | 1.31 | 1.40 | 1.49 | 1.57 | 1.65 | 1.72 |
| Avg. Power (W) | 250 | 180 | 140 | 120 | 110 | 105 | 100 | 95 | 90 | 85 | 80 | 75 | 70 | 65 | 60 | 55 |

Connector & Assembly Information



Part Numbering Code



*If any special connector required, one of the connector code can be replaced with 'M'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PM Test |
| DC | Delay-Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Type: SMA Male
 P/N: SMA-J503-02
 Code: 012
 Mat.: Brass body with stainless steel nut
 Freq.: 26.5GHz
 VSWR: 1.25:1



Type: SMA Male RA
 P/N: SMA-JW-06-00
 Code: 05
 Mat.: Brass body with stainless steel nut
 Freq.: 18GHz
 VSWR: 1.30:1



Type: N Male
 P/N: N-J-02-00A
 Code: 07
 Mat.: Stainless steel
 Freq.: 18GHz
 VSWR: 1.25:1

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length in. | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-------------------|----------------|-------------|---------------|---------------------------------|-------|------|---------|---------|-------|------|---------|
| | Connector 1 | Connector 2 | | DC-1.0 | 1.0-4 | 4-10 | 10-16.5 | DC-1.0 | 1.0-4 | 4-10 | 10-16.5 |
| E06-012-011-0.150 | SMA Male | SMA Male | 0.1 | 0.5 | 0.4 | 0.6 | 0.7 | 1.05 | 1.20 | 1.30 | 1.30 |
| E06-012-012-0.250 | SMA Male | SMA Male | 0.2 | 0.5 | 0.4 | 0.7 | 0.8 | 1.05 | 1.20 | 1.30 | 1.30 |
| E06-012-013-0.350 | SMA Male | SMA Male | 0.3 | 0.4 | 0.3 | 0.8 | 1.0 | 1.05 | 1.20 | 1.30 | 1.30 |
| E06-012-014-0.450 | SMA Male | SMA Male | 0.4 | 0.4 | 0.6 | 1.0 | 1.2 | 1.05 | 1.20 | 1.30 | 1.30 |
| E06-012-015-0.550 | SMA Male | SMA Male | 0.5 | 0.5 | 0.7 | 1.2 | 1.4 | 1.05 | 1.20 | 1.30 | 1.30 |
| E06-05-01-0.150 | SMA RA Male | SMA RA Male | 0.1 | 0.5 | 0.4 | 0.6 | 0.6 | 1.20 | 1.25 | 1.30 | |
| E06-05-01-0.250 | SMA RA Male | SMA RA Male | 0.2 | 0.5 | 0.4 | 0.7 | 0.7 | 1.20 | 1.25 | 1.30 | |
| E06-05-01-0.350 | SMA RA Male | SMA RA Male | 0.3 | 0.4 | 0.3 | 0.8 | 0.8 | 1.20 | 1.25 | 1.30 | |
| E06-05-01-0.450 | SMA RA Male | SMA RA Male | 0.4 | 0.4 | 0.6 | 1.0 | 1.0 | 1.20 | 1.25 | 1.30 | |
| E06-05-01-0.550 | SMA RA Male | SMA RA Male | 0.5 | 0.5 | 0.7 | 1.2 | 1.2 | 1.20 | 1.25 | 1.30 | |
| E06-07-01-0.150 | N Male | N Male | 0.1 | 0.5 | 0.4 | 0.6 | 0.6 | 1.05 | 1.20 | 1.30 | |
| E06-07-01-0.250 | N Male | N Male | 0.2 | 0.5 | 0.4 | 0.7 | 0.7 | 1.05 | 1.20 | 1.30 | |
| E06-07-01-0.350 | N Male | N Male | 0.3 | 0.4 | 0.3 | 0.8 | 0.8 | 1.05 | 1.20 | 1.30 | |
| E06-07-01-0.450 | N Male | N Male | 0.4 | 0.4 | 0.6 | 1.0 | 1.0 | 1.05 | 1.20 | 1.30 | |
| E06-07-01-0.550 | N Male | N Male | 0.5 | 0.5 | 0.7 | 1.2 | 1.2 | 1.05 | 1.20 | 1.30 | |

E15 Low Loss .070 Semi-rigid Cable Assembly

High-end application components such as high frequency, low loss, 3D bending, phase matching and tracking are available

Construction



| Description | Diameter(mm) | Material |
|--------------------|--------------|------------------|
| 1 Center conductor | 0.51 | Solid GPCW |
| 2 Dielectric | 1.47 | Low-density PTFE |
| 3 Outer shield | 2.88 | Tin |

Features & Advantage

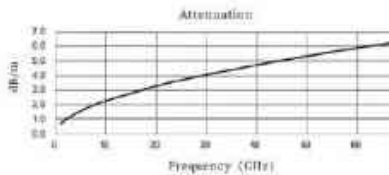
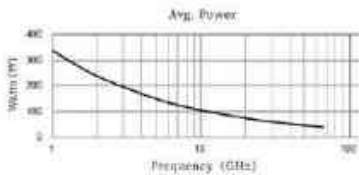
- Compliant with MIL-C 17 spec
- Very good shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|--------------------------------|---------|
| Bend Radius: installation (mm) | 10 |
| Weight (g/m) | 12 |
| Temp. Operating (°C) | 60 +15% |

Electrical

| | | | |
|----------------------------|------|-----------------------------|-------|
| Impedance (Ω/imp) | 50 | Shielding Effectiveness(dB) | <-170 |
| Velocity of Propagation(%) | 76 | Cut-Off Frequency(GHz) | 70 |
| Delay Time (ns/in) | 4.20 | Capacitance (pF/in) | 87 |
| Voltage Withstand (V) | 300 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

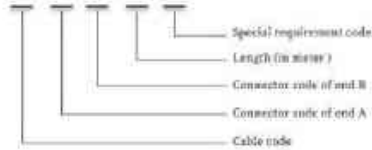
| Frequency (GHz) | 1 | 2 | 5 | 8 | 10 | 20 | 26.5 | 40 | 50 | 60 | 67 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.70 | 0.99 | 1.58 | 2.02 | 2.26 | 3.25 | 3.77 | 4.69 | 5.29 | 5.84 | 6.20 |
| Avg. Power (W) | 325 | 236 | 148 | 116 | 103 | 72 | 62 | 50 | 44 | 40 | 38 |

Connector & Assembly Information



Part Numbering Code

E15 - 01 - 01 - 1M / PM



*If any other connector is required, one of the connector code can be replaced with 99

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Arms |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Type: 2.4 Male, Movable Nut
P/N: 2.4 J-20-00
Code: 99
Mat.: Stainless steel
Freq.: 50GHz
VSWR: 1.30:1



Type: 1.85 Male, Movable Nut
P/N: 1.85 J-09-00
Code: 0P
Mat.: Stainless steel
Freq.: 67GHz
VSWR: 1.35:1

Note: Customized connectors are available on request.

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length mm | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | |
|-----------------|----------------|-------------|--------------|---------------------------------|-----------|----------|-------------|------------|-----------|----------|-------------|
| | Connector 1 | Connector 2 | | DC-5.5 GHz | 5.5-6 GHz | 6-18 GHz | 18-26.5 GHz | DC-2.5 GHz | 2.5-6 GHz | 6-18 GHz | 18-26.5 GHz |
| E15-29-39-0.1M | 2.4 Male | 2.4 Male | 0.1 | 0.0 | 1.0 | 1.2 | 1.2 | 1.25 | 1.30 | 1.30 | |
| E15-39-39-0.2M | 2.4 Male | 2.4 Male | 0.2 | 1.0 | 1.5 | 1.7 | 1.7 | 1.35 | 1.30 | 1.30 | |
| E15-39-39-0.25M | 2.4 Male | 2.4 Male | 0.25 | 1.0 | 2.0 | 2.2 | 2.2 | 1.35 | 1.30 | 1.30 | |
| E15-39-39-0.4M | 2.4 Male | 2.4 Male | 0.4 | 2.0 | 3.0 | 3.8 | 3.8 | 1.39 | 1.30 | 1.30 | |
| E15-39-39-0.6M | 2.4 Male | 2.4 Male | 0.6 | 2.4 | 3.5 | 4.5 | 4.5 | 1.40 | 1.30 | 1.30 | |
| E15-09-09-0.1M | 1.85 Male | 1.85 Male | 0.1 | 0.0 | 1.0 | 1.2 | 1.2 | 1.25 | 1.30 | 1.30 | 1.35 |
| E15-09-09-0.2M | 1.85 Male | 1.85 Male | 0.2 | 1.0 | 1.5 | 1.7 | 1.7 | 1.25 | 1.20 | 1.30 | 1.35 |
| E15-09-09-0.25M | 1.85 Male | 1.85 Male | 0.25 | 1.0 | 2.0 | 2.2 | 2.2 | 1.25 | 1.20 | 1.30 | 1.35 |
| E15-09-09-0.4M | 1.85 Male | 1.85 Male | 0.4 | 2.0 | 2.5 | 2.8 | 2.8 | 1.25 | 1.20 | 1.30 | 1.35 |
| E15-09-09-0.6M | 1.85 Male | 1.85 Male | 0.6 | 2.0 | 3.0 | 3.3 | 3.3 | 1.25 | 1.20 | 1.30 | 1.35 |



F Series -- Hand Formable Cable Assemblies

(Suited for Connection in Chassis)

BENEFITS:

- ★ Good flexibility
- ★ Low loss, low VSWR
- ★ Hand formable to almost any custom shape without special bending tools
- ★ Support to 26.5GHz both terminated with right angle connectors
- ★ .141 & .086 hand formable cables with stock available per standard lengths

APPLICATIONS:

- ★ Ideal for use for integrating system & sub-assemblies
- ★ Replacement for custom bent semi-rigid cables in most cases

'STATE-OF-THE-ART' TECHNOLOGY Brings You Excellent Hand Formable Cable Assemblies

Features

- Anti-torque design to prevent the cable from damage during installation
- Low VSWR 1.25:1@18GHz; 1.30:1@26.5GHz
1.35:1@40GHz; 1.40:1@50GHz
- SMA RA connector up to 26.5GHz
- Cables available .047, .086, .141

Applications

- Replacement for semi-rigid cable assemblies
- Interconnection system
- Commercial / Military receiver & transmitter

DC-50GHz



1 Day to 1 Week
In Stock!

Optional Connectors

| | |
|-------|--|
| .047" | SMA (26.5GHz), 2.92mm (40GHz), SMP(40GHz), SSMP(40GHz), MCR(12GHz) |
| .086" | SMA (26.5GHz), 2.92mm (40GHz), 2.4mm (50GHz), SMP(40GHz) |
| .141" | SMA (26.5GHz), N (16GHz) |

Cable Assemblies VSWR



F01J Jacketed Hand Formable .086 Cable Assembly

Construction



| | Description | Diameter(mm) | Material |
|---|------------------|--------------|------------------|
| 1 | Center conductor | 0.52 | Solid SPCW |
| 2 | Dielectric | 1.55 | PTFE |
| 3 | Outer shield | 2.18 | Tinned SPC Braid |
| 4 | Jacket | 2.65 | PEP |

Features & Advantage

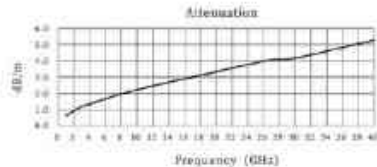
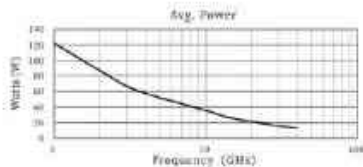
- Frequency up to 40GHz
- High shielding effectiveness
- Easy to bend and install
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|----------------------------|------------|
| Band Radius: metal (mm) | 8 |
| Band Radius: repeated (mm) | 12 |
| Weight (g/m) | 21.6 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|-------|
| Impedance (ohms) | 50 | Shielding Effectiveness(dB) | < 120 |
| Velocity of Propagation(%) | 76 | Cut-Off Frequency(GHz) | 40 |
| Delay Time (ns/m) | 4.3 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 1500 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

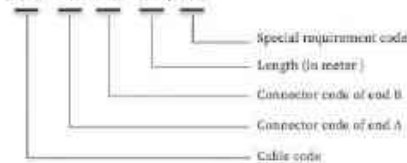
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 26.5 | 30 | 40 |
| Attenuation (dB/m) | 0.65 | 0.93 | 1.29 | 1.34 | 1.51 | 1.67 | 1.79 | 2.22 | 2.46 | 2.46 | 2.89 | 3.10 | 4.03 | 4.17 | 5.27 |
| Avg. Power (W) | 122 | 87 | 82 | 55 | 52 | 48 | 41 | 36 | 31 | 27 | 25 | 23 | 18 | 16 | 13 |

Connector & Assembly Information



Part Numbering Code

F01J - 01 - 01 - 1M / PM



*If only one connector requested, use of the connector code can be replaced with '00'

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| DT | PIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | |
|--|---|---|---|
|  <p>Type: SMA Male P/N: SMA-002-04 Code: 012 Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.20:1</p> |  <p>Type: SMA Male RA P/N: SMA-003-006 Code: 00R Mat.: Brass body with stainless steel nut Freq.: 26.5GHz VSWR: 1.40:1</p> |  <p>Type: 2.92 Male P/N: 2.92-F-02-00B Code: 4H Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 Female P/N: 2.92-F-02-00 Code: 4F Mat.: Stainless steel Freq.: 40GHz VSWR: 1.25:1</p> |
|  <p>Type: 2.92 F Ballmount P/N: 2.92-F-04-00 Code: 420 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 F Flange P/N: 2.92-F-00-00 Code: 611 Mat.: Stainless steel Freq.: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Male P/N: 2.4-F-1-00 Code: 192 Mat.: Brass body with stainless steel nut Freq.: 50GHz VSWR: 1.30:1</p> |  <p>Type: 2.4 Female P/N: 2.4-F-02-00 Code: 402 Mat.: Stainless steel Freq.: 50GHz VSWR: 1.30:1</p> |
|  <p>Type: SMP Female P/N: SMP-FW-01-00 Code: 371 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: SMP Female RA P/N: SMP-FW-01-00 Code: 381 Mat.: Brass Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: 1-IMP Male P/N: 1-IMP-F-01-00 Code: 470 Mat.: Brass Freq.: 4GHz VSWR: 1.20:1</p> | |

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|--------------------|----------------|---------------|-------------|---------------------------------|------|---------|---------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | DC-6 | 4-12 | 16-20.4 | 26.5-40 | DC-6 | 4-12 | 16-20.4 | 26.5-40 |
| F01J-012-012-0.1M | SMA Male | SMA Male | 0.1 | 0.6 | 0.4 | 0.5 | 0.5 | 1.15 | 1.50 | 1.55 | |
| F01J-012-012-0.25M | SMA Male | SMA Male | 0.2 | 0.7 | 0.5 | 0.6 | 0.6 | 1.15 | 1.50 | 1.55 | |
| F01J-012-012-0.5M | SMA Male | SMA Male | 0.5 | 0.9 | 0.6 | 0.7 | 0.7 | 1.15 | 1.50 | 1.55 | |
| F01J-012-040-0.1M | 2.92 Male | 2.92 Male | 0.1 | 0.6 | 0.6 | 0.9 | 1.4 | 1.15 | 1.30 | 1.30 | 1.30 |
| F01J-012-040-0.25M | 2.92 Male | 2.92 Male | 0.2 | 0.7 | 0.7 | 1.0 | 1.4 | 1.15 | 1.30 | 1.30 | 1.30 |
| F01J-012-040-0.5M | 2.92 Male | 2.92 Male | 0.5 | 0.9 | 0.9 | 1.2 | 1.5 | 1.15 | 1.30 | 1.30 | 1.30 |
| F01J-018-058-0.1M | SMA Male RA | SMA Male RA | 0.1 | 0.6 | 0.6 | 1.0 | 1.8 | 1.25 | 1.55 | 1.60 | |
| F01J-018-058-0.25M | SMA Male RA | SMA Male RA | 0.2 | 0.7 | 0.7 | 1.2 | 1.8 | 1.25 | 1.55 | 1.60 | |
| F01J-018-058-0.5M | SMA Male RA | SMA Male RA | 0.5 | 0.9 | 0.9 | 1.3 | 1.8 | 1.25 | 1.55 | 1.60 | |
| F01J-371-371-0.1M | SMP Female | SMP Female | 0.1 | 0.6 | 0.6 | 0.9 | 0.9 | 1.20 | 1.30 | 1.35 | |
| F01J-371-371-0.25M | SMP Female | SMP Female | 0.2 | 0.7 | 0.7 | 1.0 | 1.0 | 1.20 | 1.30 | 1.35 | |
| F01J-371-371-0.5M | SMP Female | SMP Female | 0.5 | 0.9 | 0.9 | 1.2 | 1.2 | 1.20 | 1.30 | 1.35 | |
| F01J-381-381-0.1M | SMP Female RA | SMP Female RA | 0.1 | 0.6 | 0.6 | 0.9 | 1.0 | 1.20 | 1.30 | 1.40 | |
| F01J-381-381-0.25M | SMP Female RA | SMP Female RA | 0.2 | 0.7 | 0.7 | 1.0 | 1.0 | 1.20 | 1.30 | 1.40 | |
| F01J-381-381-0.5M | SMP Female RA | SMP Female RA | 0.5 | 0.9 | 0.9 | 1.2 | 1.2 | 1.20 | 1.30 | 1.40 | |



F02J Jacketed Hand Formable .141 Cable Assembly

Construction



| Description | Diameter(mm) | Material |
|--------------------|--------------|------------------|
| 1 Center conductor | 0.92 | Solid SPCW |
| 2 Dielectric | 2.98 | PTFE |
| 3 Outer shield | 3.52 | Tinned SPC Braid |
| 4 Jacket | 4.13 | FEP |

Features & Advantage

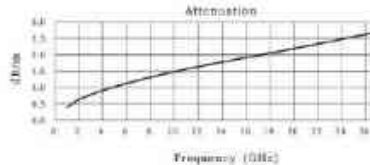
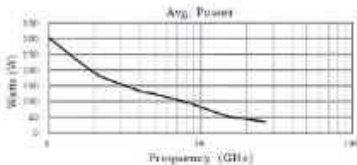
- High shielding effectiveness
- Good mechanical & electrical performance
- Up to 24.0GHz with right angle SMA male connectors at both ends
- Easy to bend and install

Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: Installation (mm) | 8 |
| Bend Radius: repeated (mm) | 28 |
| Weight (g/m) | 58.8 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|-------|
| Impedance (Ohm) | 50 | Shielding Effectiveness(dB) | > 100 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 36 |
| Delay Time (ns/m) | 4.2 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 2000 | | |



Attenuation (Typical@25°C) & Power(40°C, Sea Level)

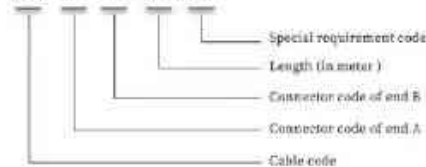
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 24.5 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation (dB/m) | 0.39 | 0.63 | 0.78 | 0.91 | 1.05 | 1.17 | 1.31 | 1.48 | 1.63 | 1.78 | 1.92 | 2.05 | 2.66 |
| Avg. Power (W) | 303 | 192 | 155 | 133 | 123 | 113 | 97 | 82 | 68 | 57 | 49 | 46 | 33 |

Connector & Assembly Information



Part Numbering Code

F02J - 01 - 01 - 1M / PM



**If only one connector required, one of the connector code can be replaced with '00'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Bending |
| IM3 | PM Test |
| DE | Delay Line |
| WA | Welded Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Type: SMA Male
P/N: SMA-2003-02
Code: 012
Mat.: Brass body with stainless steel nut
Freq.: 26.5GHz
VSWR: 1.25:1



Type: SMA Male RA
P/N: SMA-JW-06-00
Code: 056
Mat.: Brass body with stainless steel nut
Freq.: 18GHz
VSWR: 1.30:1



Type: N Male
P/N: N-J-02-00A
Code: 07
Mat.: Stainless steel
Freq.: 18GHz
VSWR: 1.25:1

Note: Customized connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-------------------|----------------|-------------|-------------|---------------------------------|-------|------|---------|---------------|-------|------|---------|
| | Connector 1 | Connector 2 | | DC-2.3 GHz | 2.3-4 | 4-18 | 18-26.5 | DC-2.3 GHz | 2.5-4 | 4-18 | 18-26.5 |
| F02J-012-012-0.1M | SMA Male | SMA Male | 0.1 | 0.4 | 0.5 | 0.7 | 0.8 | 1.15 | 1.20 | 1.30 | 1.35 |
| F02J-012-012-0.2M | SMA Male | SMA Male | 0.2 | 0.4 | 0.6 | 0.8 | 1.0 | 1.15 | 1.20 | 1.30 | 1.35 |
| F02J-012-012-0.3M | SMA Male | SMA Male | 0.3 | 0.5 | 0.7 | 1.1 | 1.3 | 1.15 | 1.20 | 1.30 | 1.35 |
| F02J-056-056-0.1M | SMA Male RA | SMA Male RA | 0.1 | 0.5 | 0.6 | 0.8 | 0.9 | 1.20 | 1.25 | 1.35 | 1.40 |
| F02J-056-056-0.2M | SMA Male RA | SMA Male RA | 0.2 | 0.5 | 0.7 | 1.0 | 1.1 | 1.20 | 1.25 | 1.35 | 1.40 |
| F02J-056-056-0.3M | SMA Male RA | SMA Male RA | 0.3 | 0.6 | 0.8 | 1.2 | 1.4 | 1.20 | 1.25 | 1.35 | 1.40 |
| F02J-07-07-0.1M | N Male | N Male | 0.1 | 0.4 | 0.5 | 0.7 | 0.8 | 1.15 | 1.20 | 1.30 | 1.35 |
| F02J-07-07-0.2M | N Male | N Male | 0.2 | 0.4 | 0.6 | 0.9 | 0.9 | 1.15 | 1.20 | 1.30 | 1.35 |
| F02J-07-07-0.3M | N Male | N Male | 0.3 | 0.5 | 0.7 | 1.1 | 1.1 | 1.15 | 1.20 | 1.30 | 1.35 |

F05J Jacketed Hand Formable .250 Cable Assembly

Construction



| Description | Diameter(mm) | Material |
|--------------------|--------------|------------------|
| 1 Center conductor | 1.65 | Solid SPCW |
| 2 Dielectric | 5.31 | PTFE |
| 3 Outer shield | 6.10 | Tinned SPC Braid |
| 4 Jacket | 6.90 | FEP |

Features & Advantage

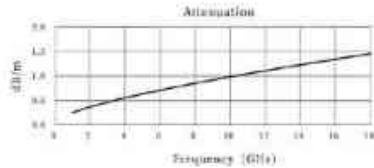
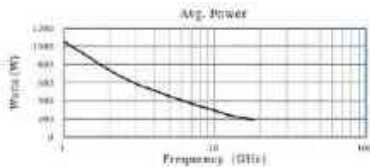
- High shielding effectiveness
- Easy to bend and install
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|--------------------------------|------------|
| Bend Radius: installation (mm) | 70 |
| Bend Radius: repeated (mm) | 60 |
| Weight (g/m) | 134.8 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|----------------------------|------|-----------------------------|--------|
| Impedance (Ohms) | 50 | Shielding Effectiveness(dB) | > -100 |
| Velocity of Propagation(%) | 70 | Cut-Off Frequency(GHz) | 18 |
| Delay Time (ns/m) | 4.7 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 3500 | | |



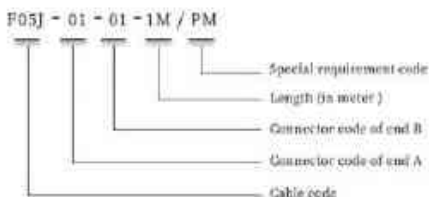
Attenuation (Typical@25°C) & Power(40°C, Sea Level)

| | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| Attenuation (dB/m) | 0.25 | 0.37 | 0.46 | 0.55 | 0.63 | 0.71 | 0.83 | 0.96 | 1.10 | 1.22 | 1.34 | 1.45 |
| Avg. Power (W) | 1056 | 739 | 687 | 511 | 430 | 407 | 339 | 280 | 249 | 228 | 200 | 190 |

Connector & Assembly Information



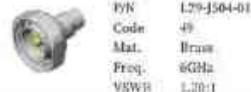
Part Numbering Code



**If only one connector requested, one of the connector code can be replaced with '0'*

| Code N | Special Requirement |
|--------|--|
| PM | Phase Match |
| B | Breaking |
| IMA | PIM Test |
| DE | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with PU/PVC Jacket over Stainless Steel Braid & Spiral |
| NA | Nylon Braid |
| M | Water Proof |

Connector Code



Note: Customised connectors are available on request

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------|----------------|-------------|-------------|---------------------------------|---------|----------|-----------|---------|---------|----------|-----------|
| | Connector 1 | Connector 2 | | DC-2 | 2-8 GHz | 8-12 GHz | 12-18 GHz | DC-2 | 2-8 GHz | 8-12 GHz | 12-18 GHz |
| F05J-01-01-0.1M | SMA Male | SMA Male | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-01-01-0.2M | SMA Male | SMA Male | 0.2 | 0.2 | 0.4 | 0.6 | 0.7 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-01-01-0.3M | SMA Male | SMA Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-07-07-0.1M | N Male | N Male | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-07-07-0.2M | N Male | N Male | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-07-07-0.3M | N Male | N Male | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.05 | 1.20 | 1.25 | 1.35 |
| F05J-49-49-0.1M | L29 Male | L29 Male | 0.1 | 0.2 | 0.3 | | | 1.20 | 1.25 | | |
| F05J-49-49-0.2M | L29 Male | L29 Male | 0.2 | 0.2 | 0.4 | | | 1.20 | 1.25 | | |
| F05J-49-49-0.3M | L29 Male | L29 Male | 0.3 | 0.4 | 0.5 | | | 1.20 | 1.25 | | |

F06J Jacketed Hand Formable .250 Cable Assembly

Construction



| Description | Diameter (mm) | Material |
|---------------------|---------------|------------------|
| 1. Center conductor | 0.29 | Solid SPCW |
| 2. Dielectric | 0.94 | PTFE |
| 3. Outer shield | 1.19 | Tinned SPC Braid |
| 4. Jacket | 1.60 | FEP |

Features & Advantage

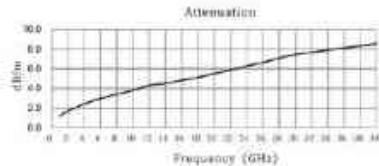
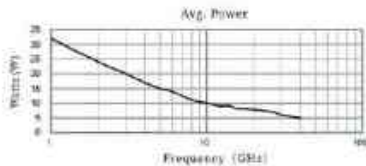
- Frequency up to 40GHz
- Very small bending radius, easy to bend and install
- High shielding effectiveness
- Good mechanical & electrical performance

Mechanical & Environmental

| | |
|-------------------------------|------------|
| Bend Radius Installation (mm) | 4.2 |
| Bend Radius repeated (mm) | 8.4 |
| Weight (g/m) | 5.3 |
| Temp. Operating (°C) | -55 ~ +125 |

Electrical

| | | | |
|-----------------------------|-----|------------------------------|-------|
| Impedance (Ohms) | 50 | Shielding Effectiveness (dB) | < 100 |
| Velocity of Propagation (%) | 70 | Cut-Off Frequency (GHz) | 110 |
| Delay Time (ns/m) | 4.7 | Capacitance (pF/m) | 95 |
| Voltage Withstand (V) | 750 | | |



Attenuation (Typical @ 25°C) & Power (40°C, Sea Level)

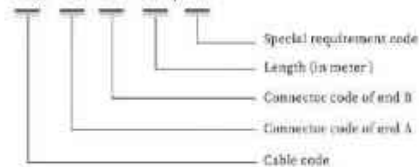
| | | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency (GHz) | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 25.5 | 30 | 40 |
| Attenuation (dB/m) | 1.14 | 1.70 | 2.03 | 2.41 | 2.69 | 2.95 | 3.41 | 3.81 | 4.30 | 4.51 | 4.83 | 5.12 | 6.74 | 7.44 | 8.57 |
| Avg. Power (W) | 32 | 24 | 20 | 17 | 15 | 14 | 11 | 10 | 9 | 9 | 8 | 8 | 7 | 6 | 5 |

Connector & Assembly Information



Part Numbering Code

F06J - 01 - D1 - 1M / PM



**If only one connector required, use of the connector code can be replaced with '0'*

| Code N | Special Requirement |
|--------|---|
| PM | Phase Match |
| B | Bending |
| DM | DM Test |
| DL | Delay Line |
| WA | Interlocked Stainless Steel Armor |
| VA | Armor with FEP/PVC Jacket over Stainless Steel Braid & Spiral |
| BA | Nylon Braid |
| M | Water Proof |

Connector Code

| | | | | |
|--|---|--|---|--|
|  <p>Type: SMA Male PN: SMA-01-00 Code: 01 Mat: Stainless steel Freq: 26.5 VSWR: 1.25:1</p> |  <p>Type: 2.92 Male PN: 2.92J-25-00 Code: 40 Mat: Brass body with stainless steel nut Freq: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 Female PN: 2.92 F-03-00 Code: 40 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.92 F Bulkhead PN: 2.92-KY-00-00 Code: 02 Mat: Stainless steel Freq: 40GHz VSWR: 1.30:1</p> |  <p>Type: 2.1 Male PN: 2.1-J-02-00 Code: 29 Mat: Brass body with stainless steel nut Freq: 30GHz VSWR: 1.30:1</p> |
|  <p>Type: 2.4 F Bulkhead PN: 2.4-FC-03-00 Code: 10 Mat: Stainless steel Freq: 18GHz VSWR: 1.25:1</p> |  <p>Type: SMP Male PN: SMP-J-10-00 Code: 30 V Mat: Brass Freq: 10GHz VSWR: 1.25:1</p> |  <p>Type: SMP Female PN: SMP-F-02-00 Code: 37 Mat: Brass Freq: 10GHz VSWR: 1.25:1</p> |  <p>Type: SMP Female RA PN: SMP-0W-00-00 Code: 38 Mat: Brass Freq: 10GHz VSWR: 1.25:1</p> |  <p>Type: SMP Male RA PN: SMP-MW-01-00 Code: 0C Mat: Brass Freq: 10GHz VSWR: 1.25:1</p> |
|  <p>Type: 1.875 Male PN: 1.875-01-00 Code: 31 Mat: Brass Freq: 18GHz VSWR: 1.25:1</p> |  <p>Type: 1.875 Female PN: 1.875-K-01-00 Code: 30 Mat: Brass Freq: 18GHz VSWR: 1.30:1</p> |  <p>Type: MCK Male PN: MCK-J-01-00 Code: 27 Mat: Brass Freq: 22GHz VSWR: 1.20:1</p> | <p>Note: Customized connectors are available on request</p> | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type: | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|-----------------|-----------------|-------------|-------------|---------------------------------|------|---------|---------|---------|------|---------|---------|
| | Connector 1 | Connector 2 | | GHz | | | | GHz | | | |
| | | | | DC-6 | 6-18 | 18-26.5 | 26.5-40 | DC-6 | 6-18 | 18-26.5 | 26.5-40 |
| F06J-01-01-0.1M | SMA Male | SMA Male | 0.1 | 0.0 | 1.0 | 1.2 | 1.20 | 1.30 | 1.35 | | |
| F06J-01-01-0.2M | SMA Male | SMA Male | 0.2 | 0.0 | 1.5 | 1.9 | 1.20 | 1.30 | 1.35 | | |
| F06J-01-01-0.5M | SMA Male | SMA Male | 0.5 | 1.2 | 2.1 | 2.6 | 1.20 | 1.30 | 1.35 | | |
| F06J-07-07-0.1M | SMP Female | SMP Female | 0.1 | 0.6 | 1.0 | 1.2 | 1.4 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-07-07-0.2M | SMP Female | SMP Female | 0.2 | 0.9 | 1.5 | 1.9 | 2.3 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-07-07-0.5M | SMP Female | SMP Female | 0.5 | 1.2 | 2.1 | 2.6 | 3.2 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-09-09-0.1M | 2.4 Male | 2.4 Male | 0.1 | 0.0 | 1.0 | 1.2 | 1.4 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-09-09-0.2M | 2.4 Male | 2.4 Male | 0.2 | 0.9 | 1.5 | 1.9 | 2.3 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-09-09-0.5M | 2.4 Male | 2.4 Male | 0.5 | 1.2 | 2.1 | 2.6 | 3.2 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-40-40-0.1M | 2.92 Male | 2.92 Male | 0.1 | 0.6 | 1.0 | 1.2 | 1.4 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-40-40-0.2M | 2.92 Male | 2.92 Male | 0.2 | 0.9 | 1.5 | 1.9 | 2.3 | 1.20 | 1.30 | 1.30 | 1.35 |
| F06J-40-40-0.5M | 2.92 Male | 2.92 Male | 0.5 | 1.2 | 2.1 | 2.6 | 3.2 | 1.20 | 1.30 | 1.30 | 1.35 |



Test Cable Assemblies

(Micable - TestCableAssembliesExpert)

BENEFITS:

- ★SRFS has developed a number of test cable assemblies with frequency from 6GHz to 110GHz. Construction of this cable family is ruggedized, high reliable and has unmatched long life over flexure & very cost effective.
- ★ Special recommend: T26/AT26 cable assembly is qualified over 150K flex cycles & still keep good amplitude & phase stability.

APPLICATIONS:

- ★ High volume production testing
- ★ Use in stringent test lab environment
- ★ Vector network analyzer measurement
- ★ High & low temperature testing
- ★ Other areas requiring integration

Test Cable Solution

Try me !!!
In STOCK
1 day - 1 week

Reliable

Precision

Stable

Durable

T110 Series



DC-110GHz

High Performance
Millimeter Wave
Stainless Steel Armor Protection



AT Series

26.5/40/50/67/110GHz

High Precision
Armor Protected
Long Life Cycles



T18 Series

DC-18GHz

High Performance
High Reliability
Flexible, Long Life Cycles



B17 Series

DC-67GHz

High Performance
Millimeter Wave
High Precision & Cost Effective



T26 Series

DC-26.5GHz

Super Precision & Stability
Ultra-Long Life
Qualified for over 150K Bending Cycles



C341 Series

DC-26.5GHz

High Performance
Long Life
Excellent Stability for High Accuracy Measurement



T40/50 Series

40/50GHz

High Reliability
High Accuracy
Flexible & Durable, Long Life Cycles



VNA Series

26.5/40/50/67GHz

Test Cable for
Vector Network Analyzer
Super Precision & Stability Competitive Price



T410 Series

DC-40GHz

Wide Temperature Range
High Accuracy
Special for Thermal Shock Testing



D10 Series DC~6GHz Cost-effective Test Cable with Reinforced Structure

(Suited for high reliable & frequent tests)

Features & Advantage

- Reinforced connectors, high reliability, long life-cycle
- The cable has good flexibility & feels comfortable
- High performance & cost-effective

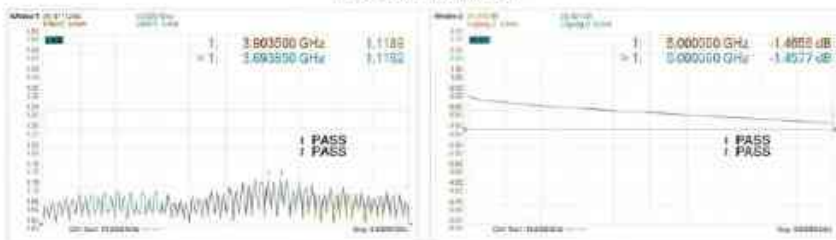
Application

- Mobile / IPAD / Wifi / Base station testing
- RF field test
- High volume production test
- Research & development labs

Electrical

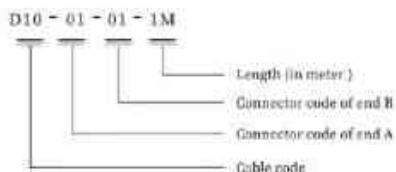
| | |
|-------------------------|---------------|
| Outer Diameter | 5.30mm |
| Jacket | PVC |
| Operating Frequency | 6GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 25mm |
| Insertion Loss(Max.) | 1.27dB/m@6GHz |
| Shielding Effectiveness | <-80dB |
| Operating Temp. | 23±5 C |
| Storage Temp. | -40 ~ +80 C |

Test Curve (1.0 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code

| | | | |
|---|--|---|--|
|  | Type: SMA Male P/N: SMA-J402-02 Code: 01 Mat.: Brass Freq.: 6GHz VSWR: 1.20:1 |  | Type: SMA Male RA P/N: SMA-JW402-01 Code: 05 Mat.: Brass Freq.: 6GHz VSWR: 1.20:1 |
|  | Type: SMA Female P/N: SMA-E402-01 Code: 02 Mat.: Brass Freq.: 6GHz VSWR: 1.20:1 |  | Type: N Male P/N: N-J-60-60C Code: 07 Mat.: Brass Freq.: 6GHz VSWR: 1.20:1 |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|----------------|----------------|-------------|-------------|---------------------------------|-----|-----|-----|---------|------|------|------|
| | Connector 1 | Connector 2 | | GHz | | | | GHz | | | |
| | | | | DC-1 | 1-2 | 2-4 | 4-6 | DC-1 | 1-2 | 2-4 | 2-6 |
| D10-01-01-0.1M | SMA Male | SMA Male | 0.1 | 0.3 | 0.6 | 0.7 | 1.0 | 1.10 | 1.15 | 1.20 | 1.25 |
| D10-01-01-1M | SMA Male | SMA Male | 1.0 | 0.6 | 1.1 | 1.3 | 1.8 | 1.30 | 1.35 | 1.30 | 1.25 |
| D10-01-07-1M | SMA Male | N Male | 1.0 | 0.6 | 1.1 | 1.3 | 1.8 | 1.30 | 1.35 | 1.20 | 1.30 |
| D10-07-07-1M | N Male | N Male | 1.0 | 0.6 | 1.1 | 1.3 | 1.8 | 1.30 | 1.35 | 1.30 | 1.30 |

C04I Series DC~26.5GHz Ultra Flexible & Durable Test Cable Assemblies

(Suited for high accuracy & long life tests)

Features & Advantage

- Qualified by over 20K flex cycles
- Qualified by hundred thermal shock testing (-45~+85°C)
- High shielding effectiveness < -95dB
- Excellent phase & amplitude stability
- Ultra flexible
- Cost effectiveness

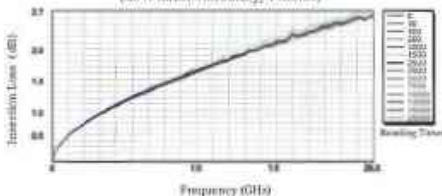
Application

- RF field test
- High volume production test
- Point to point equipment test
- Mobile / IPAD / Wifi / Base station testing
- Research & development labs

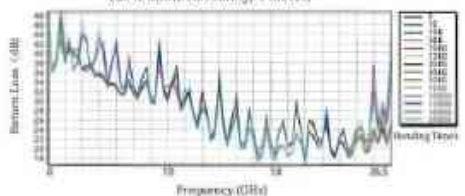
Electrical

| | |
|--------------------------------|-------------------|
| Outer Diameter | 4.95mm |
| Jacket | PVC |
| Operating Frequency | 26.5GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 25mm |
| Insertion Loss(Max.) | 2.59dB/m@26.5GHz |
| Shielding Effectiveness | < -95dB |
| Phase Stability over flex. | ±3°@26.5GHz |
| Amplitude Stability over Flex. | < ±0.05dB@26.5GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -45 ~ +85 C |

Insertion Loss Change over 20K Flex Cycles
(C04I Cable Assembly, 1 Meter)

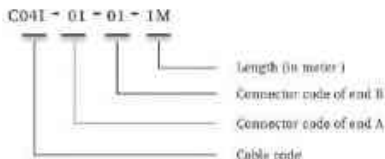


Return Loss Change over 20K Flex Cycles
(C04I Cable Assembly, 1 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code

| | | |
|--|--|--|
|  <p>Type: SMA Male P/N: SMA-J-04-00F Code: 01 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male RA P/N: SMA-JW-01-00F Code: 05 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.35:1</p> |  <p>Type: SMA Female P/N: SMA-K-04-00F Code: 07 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.30:1</p> |
|  <p>Type: 3.5 Male P/N: 3.5-J-01-00H Code: 47 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: 3.5 Female P/N: 3.5-K-01-00H Code: 68 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.30:1</p> |  <p>Type: N Male P/N: N-J-02-00P Code: 07 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |
|  <p>Type: N Female P/N: N-K-04-00 Code: 08 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.40:1</p> |  <p>Type: BNC Male P/N: BNC-J-04-00 Code: 15 Mat.: Brass Freq.: 4GHz VSWR: 1.20:1</p> | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length | | Attenuation Insertion Loss (dB) | | | | | | VSWR(1) | | |
|-----------------|----------------|-------------|--------|-----|---------------------------------|-------|------|---------|--------|-------|---------|---------|--|
| | Connector 1 | Connector 2 | Feet | m | GHz | | | | GHz | | GHz | | |
| | | | | | DC-2.5 | 2.5-8 | 8-14 | 18-26.5 | DC-2.5 | 2.5-8 | 8-18 | 18-26.5 | |
| C04-01-01-1.5FT | SMA Male | SMA Male | 1.5 | | 0.4 | 0.3 | 1.1 | 1.5 | 1.15 | 1.15 | 1.20 | 1.25 | |
| C04-01-01-3FT | SMA Male | SMA Male | 3.0 | | 0.7 | 0.3 | 1.3 | 2.3 | 1.15 | 1.15 | 1.20 | 1.35 | |
| C04-01-01-1FT | SMA Male | SMA Male | 3.0 | | 0.9 | 1.3 | 2.5 | 3.0 | 1.15 | 1.15 | 1.20 | 1.35 | |
| C04-01-01-4FT | SMA Male | SMA Male | 4.0 | | 1.2 | 1.6 | 3.2 | 4.1 | 1.15 | 1.15 | 1.20 | 1.35 | |
| C04-01-01-6FT | SMA Male | SMA Male | 6.0 | | 1.7 | 2.1 | 4.6 | 5.0 | 1.15 | 1.15 | 1.20 | 1.35 | |
| C04-01-01-1M | SMA Male | SMA Male | | 1.0 | 1.0 | 1.4 | 3.7 | 3.5 | 1.15 | 1.15 | 1.20 | 1.35 | |
| C04-01-07-1M | SMA Male | N Male | | 1.0 | 1.0 | 1.4 | 3.7 | | 1.15 | 1.20 | 1.25 | | |
| C04-01-07-1M | N Male | N Male | | 1.0 | 1.0 | 1.4 | 2.7 | | 1.15 | 1.20 | 1.25 | | |

C05 Series DC~40GHz High Reliable Stainless Steel Armored Test Cable

(Suited for various application requiring extremely limited installation space & bending radius)

Features & Advantage

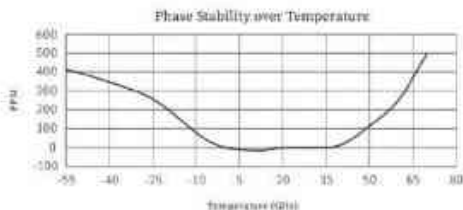
- Rugged configuration with super flexible stainless steel armor
- **Negligible changes of phase & amplitude over flexure**
- Excellent attenuation performance
- Double shielded prevention by high-shielding cable & armor
(shielding effectiveness < -95dB)
- **Guard against from salt spray, corrosion, extrusion & distortion**
- Wide range of operation temp. at -65 ~ +165 C

Application

- Space limited environment test
- Module test
- **Harsh environment test**

Electrical

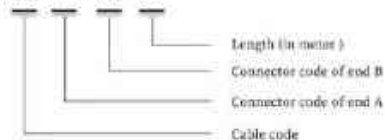
| | |
|--------------------------------|----------------------------------|
| Outer Diameter | 3.00mm |
| Jacket | Stainless steel armor, SS316L |
| Operating Frequency | SMA 26.5GHz, 2.92MMI 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 25mm |
| Insertion Loss(Max.) | 6.12dB/m@26.5GHz, 7.69dB/m@40GHz |
| Shielding Effectiveness | < -95dB |
| Phase Stability over flex. | ±1°@40GHz |
| Amplitude Stability over Flex. | < ±0.10dB@40GHz |
| Operating Temp. | -65 ~ +165 C |
| Best Operating Temp. | -40 ~ +30 C |



Connector & Assembly Information

Part Numbering Code

C05 - 01 - 01 - 1M



Connector Code



Type SMA Male
P/N SMA-13-00
Code 013
Mat. Stainless Steel
Freq. 26.35GHz
VSWR 1.30:1



Type 2.92 Male
P/N 2.92-1-07-00
Code 40
Mat. Stainless Steel
Freq. 40GHz
VSWR 1.30:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | VSWR(1:1) | | | |
|------------------|----------------|-------------|-------------|---------------------------------|-------------|----------------|----------------|-------------|-------------|----------------|----------------|
| | Connector 1 | Connector 2 | | DC-5 GHz | 6-13 GHz | 18-26.3 GHz | 26.3-40 GHz | DC-5 GHz | 6-13 GHz | 18-26.3 GHz | 26.3-40 GHz |
| C05-013-013-0.3M | SMA Male | SMA Male | 0.3 | 1.0 | 1.0 | 1.3 | | 1.17 | 1.30 | 1.35 | |
| C05-013-013-0.6M | SMA Male | SMA Male | 0.6 | 1.0 | 1.3 | 1.2 | | 1.10 | 1.30 | 1.35 | |
| C05-013-013-1M | SMA Male | SMA Male | 1.0 | 2.0 | 1.3 | 1.4 | | 1.17 | 1.30 | 1.37 | |
| C05-40-013-0.3M | 2.92 Male | 2.92 Male | 0.3 | 1.0 | 1.0 | 1.3 | 1.3 | 1.13 | 1.30 | 1.30 | 1.35 |
| C05-40-013-0.6M | 2.92 Male | 2.92 Male | 0.6 | 1.0 | 1.3 | 1.2 | 1.3 | 1.10 | 1.30 | 1.30 | 1.35 |
| C05-40-013-1M | 2.92 Male | 2.92 Male | 1.0 | 2.0 | 1.3 | 1.4 | 1.3 | 1.13 | 1.30 | 1.30 | 1.35 |

B13 Series DC~40GHz Ultra Low Loss & Durable VA Armor Protected Test Cable Assemblies

(Qualified by over 20K flex cycles, well suited for repeat tests)

Features & Advantage

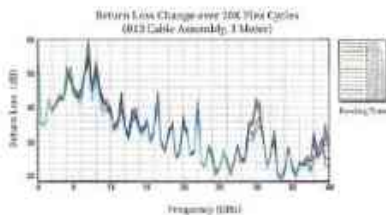
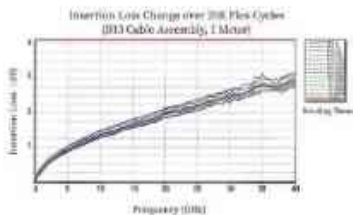
- Flexible & durable, negligible changes of phase & amplitude after flexing
- Qualified by over 20K flex cycles
- Inner-armored configuration for preventing from water, dust, extrusion & distortion

Application

- RF microwave millimeter wave test
- Point to point equipment test

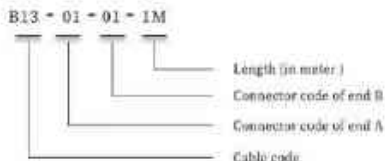
Electrical

| | |
|--------------------------------|--|
| Outer Diameter | 8.30mm |
| Jacket | Stainless Steel Screwed Tube + Stainless Steel Braid + PU Jacket |
| Operating Frequency | 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 2.56dB/m@40GHz |
| Shielding Effectiveness | <-90dB |
| Phase Stability over Flex. | ±3°@40GHz |
| Amplitude Stability over Flex. | <±0.1dB@40GHz |
| Storage Temp. | -40 ~ +50 C |



Connector & Assembly Information

Part Numbering Code



Connector Code

| | | | |
|---|---|---|--|
|  | Type: 3.5 Male P/N: 3.5-J-01-00E Code: 47 Mat.: Stainless Steel Freq.: 22GHz VSWR: 1.30:1 |  | Type: 3.5 Female P/N: 3.5-K-01-00A Code: 60 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.30:1 |
|  | Type: 2.92 Male P/N: 2.92-J-03-00 Code: 40 Mat.: Stainless Steel Freq.: 40GHz VSWR: 1.30:1 |  | Type: 2.4 Male P/N: 2.4-J-03-00 Code: 29 Mat.: Stainless Steel Freq.: 40GHz VSWR: 1.30:1 |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length | | Attenuation Insertion Loss (dB) | | | | | | VSWR(1) | | | | |
|-----------------|----------------|-------------|--------|-----|---------------------------------|------|---------|---------|------|------|---------|---------|-----|--|--|
| | Connector 1 | Connector 2 | Feet | m | DC-6 | 6-18 | 18-26.5 | 26.5-40 | DC-6 | 6-18 | 18-26.5 | 26.5-40 | | | |
| | | | | | | | | | | | | | GHz | | |
| B13-29-01-1M | 2.4 Male | 2.4 Male | | 1.0 | 1.2 | 2.0 | 2.7 | 3.6 | 1.15 | 1.30 | 1.50 | 1.70 | | | |
| B13-29-01-1M | 2.4 Male | 2.92 Male | | 1.0 | 1.2 | 2.0 | 2.7 | 3.6 | 1.15 | 1.30 | 1.50 | 1.70 | | | |
| B13-40-01-1M | 2.92 Male | 2.92 Male | | 1.0 | 1.2 | 2.0 | 2.7 | 3.6 | 1.15 | 1.30 | 1.50 | 1.70 | | | |
| B13-40-01-1.5FT | 2.92 Male | 2.92 Male | 1.5 | | 0.7 | 1.1 | 1.5 | 2.0 | 1.15 | 1.30 | 1.50 | 1.70 | | | |
| B13-40-01-2FT | 2.92 Male | 2.92 Male | 2.0 | | 0.8 | 1.4 | 1.9 | 2.5 | 1.15 | 1.30 | 1.50 | 1.70 | | | |
| B13-40-01-2.5M | 2.92 Male | 2.92 Male | | 2.5 | 0.8 | 1.7 | 2.3 | 3.0 | 1.15 | 1.30 | 1.50 | 1.70 | | | |

T26 Series DC~26.5GHz High Reliable & Durable Test Cable

(Suited for high accuracy and frequent tests in production line & labs)

Features & Advantage

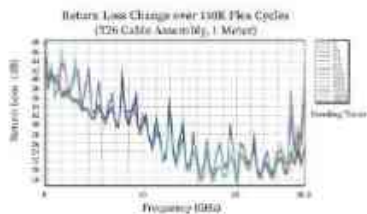
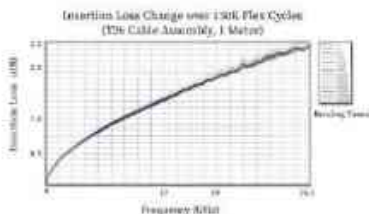
- Super flexible & durable
- High shielding effectiveness < -90dB
- Excellent phase & amplitude stability over flexure
- Outstanding return loss performance
- Qualified for over 150K flex cycles

Application

- RF field test
- High volume production test
- Mobile / IPAD / Wifi / Base station testing
- Research & development labs
- 5G test
- Point to point equipment test

Electrical

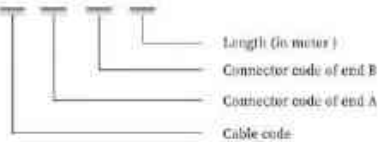
| | |
|--------------------------------|-------------------|
| Outer Diameter | 5.20mm |
| Jacket | PUR |
| Operating Frequency | 26.5GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 25mm |
| Insertion Loss(Max.) | 2.52dB/m@26.5GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over flex. | ±2°@26.5GHz |
| Amplitude Stability over Flex. | < ±0.04dB@26.5GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -40 ~ +50 C |



Connector & Assembly Information

Part Numbering Code

T26 - 47 - 47 - 1M



Connector Code

| | | | |
|---|--|---|---|
|  <p>Type: SMA Male P/N: SMA-1M-00 Code: 011 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Male RA P/N: SMA-1W-10-00 Code: 880 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: SMA Female P/N: SMA-K-06-00A Code: 020 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: 3.5 Male P/N: 3.5-J-14-00 Code: 47 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.20:1</p> |
|  <p>Type: 3.5 Male P/N: 3.5-J-27-00 Code: 470 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.20:1</p> |  <p>Type: 3.5 Male RA P/N: 3.5-JW-01-00 Code: 62 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: 3.5 Female P/N: 3.5-K-04-00 Code: 60 Mat.: Stainless Steel Freq.: 26.5GHz VSWR: 1.25:1</p> |  <p>Type: N Male P/N: N-J-17-00 Code: 071 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |
|  <p>Type: N Male RA P/N: N-JW-12-00 Code: 500 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> |  <p>Type: N Female P/N: N-KT26-01 Code: 08 Mat.: Stainless Steel Freq.: 18GHz VSWR: 1.25:1</p> | | |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connection Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(dB) | | | |
|---------------|-----------------|-------------|-------------|---------------------------------|-----------|----------|-------------|------------|-----------|----------|-------------|
| | Connector 1 | Connector 2 | | DC-2.5 GHz | 2.5-8 GHz | 8-18 GHz | 18-24.5 GHz | DC-2.5 GHz | 2.5-8 GHz | 8-18 GHz | 18-24.5 GHz |
| T26-011-071-L | SMA Male | N Male | 1M | 1.0 | 1.4 | 2.5 | N/A | | | | 1.20 |
| T26-071-071-L | N Male | N Male | | | | | | | | | |
| T26-011-011-L | SMA Male | SMA Male | | | | | | | | | |
| T26-011-020-L | SMA Male | SMA Female | 3FT | 0.2 | 0.5 | 1.3 | 2.2 | 1.12 | 1.11 | | |
| T26-020-020-L | SMA Female | SMA Female | 3FT | 0.8 | 1.5 | 2.4 | 3.0 | | | 1.25 | 1.30 |
| T26-47-47-L | 3.5 Male | 3.5 Male | 1M | 1.0 | 1.4 | 2.5 | 3.2 | | | | |
| T26-47-06-L | 3.5 Male | 3.5 Female | | | | | | | | | |
| T26-06-06-L | 3.5 Female | 3.5 Female | | | | | | | | | |

T26E Series DC~26.5GHz Wide Temperature Range Test Cable

(Suited for full temperature range cycling tests & Thermal shock tests)

Features & Advantage

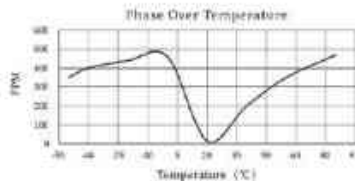
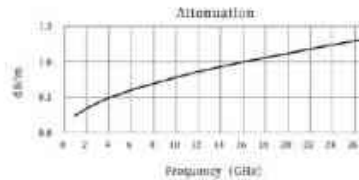
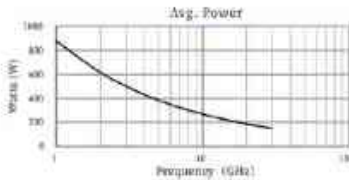
- Excellent mechanical performance & phase stability over temp.
- High shielding effectiveness & outstanding attenuation performance
- Construction is very robust, employing an advanced strain relief system
- Wide range of operation temp. at -65~+165°C

Application

- High & low temperature cycling / Thermal shock test for production line / Lab
- High-density test equipment connection
- High volume production test

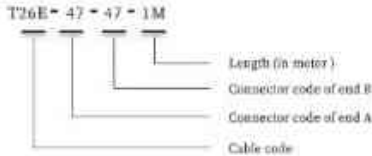
Electrical

| | |
|--------------------------------|-------------------|
| Outer Diameter: | 4.80mm |
| Jacket | FEP |
| Operating Frequency | 26.5GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 20mm |
| Insertion Loss(Max.) | 1.31dB/m@26.5GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over flex. | ±3°@26.5GHz |
| Amplitude Stability over Flex. | < ±0.06dB@26.5GHz |
| Operating Temp. | -65 ~ +165 C |



Connector & Assembly Information

Part Numbering Code



Connector Code



Type: 3.5 Male
 P/N: 3.5-J-16-00
 Code: 47
 Mat.: Stainless steel
 Freq.: 26.5GHz
 VSWR: 1.20:1



Type: 3.5 Female
 P/N: 3.5-F-08-00
 Code: 60
 Mat.: Stainless steel
 Freq.: 26.5GHz
 VSWR: 1.25:1



Type: 3.5 Male
 P/N: 3.5-J-26-00
 Code: 47H
 Mat.: Stainless steel
 Freq.: 26.5GHz
 VSWR: 1.30:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length (m) | Attenuation Insertion Loss (dB) | | | | | VSWR(dB) | | | |
|-----------------|----------------|-------------|---------------|---------------------------------|-----------|----------|-------------|------------|-----------|----------|-------------|--|
| | Connector 1 | Connector 2 | | DC-2.0 GHz | 2.0-8 GHz | 8-10 GHz | 10-26.5 GHz | DC-2.0 GHz | 2.0-8 GHz | 8-10 GHz | 10-26.5 GHz | |
| T26E-47-47-1M | 3.5 Male | 3.5 Male | 1.0 | 0.6 | 0.8 | 1.3 | 1.9 | 1.15 | 1.15 | 1.30 | 1.30 | |
| T26E-47-47-1.5M | 3.5 Male | 3.5 Male | 1.5 | 0.8 | 1.1 | 2.1 | 2.5 | 1.15 | 1.15 | 1.30 | 1.30 | |
| T26E-47-60-1M | 3.5 Male | 3.5 Female | 1.0 | 0.6 | 0.8 | 1.3 | 1.9 | 1.15 | 1.25 | 1.30 | 1.35 | |
| T26E-47-60-1.5M | 3.5 Male | 3.5 Female | 1.5 | 0.8 | 1.1 | 2.1 | 2.5 | 1.15 | 1.25 | 1.30 | 1.35 | |

T40 Series DC~40GHz High Density and Reliable Test Cable

(Suited for high accuracy millimeter wave tests in production line & labs)

Features & Advantage

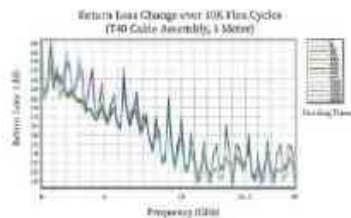
- Excellent phase & amplitude stability over flexure
- High shielding effectiveness <math>< -90\text{dB}</math>
- Construction is very robust, employing an advanced strain relief system
- Excellent attenuation performance
- Super flexible & durable
- Anti-compression & distortion

Application

- Test equipment connection
- High volume production / Lab test

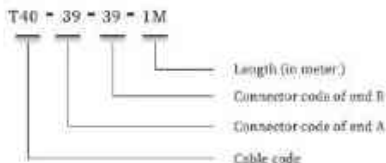
Electrical

| | |
|--------------------------------|------------------------------------|
| Outer Diameter | 3.60mm |
| Jacket | FEP |
| Operating Frequency | 40GHz |
| Impedance | 50 Ω |
| Min. Bending Radius | 14.4mm |
| Insertion Loss(Max.) | 2.92dB/m@40GHz |
| Shielding Effectiveness | <math>< -90\text{dB}</math> |
| Phase Stability over flex. | $\pm 3^\circ$ @40GHz |
| Amplitude Stability over Flex. | $< \pm 0.05\text{dB}</math>@40GHz$ |
| Operating Temp. | $23 \pm 5^\circ\text{C}$ |
| Storage Temp. | $-40 \sim +50^\circ\text{C}$ |

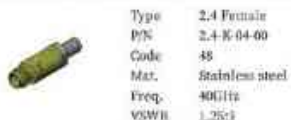
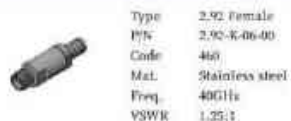


Connector & Assembly Information

Part Numbering Code



Connector Code



Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | | |
|-------------|----------------|-------------|-------------|---------------------------------|------|---------|---------|---------|------|---------|---------|--|
| | Connector 1 | Connector 2 | | 0-4 | 4-15 | 16-24.5 | 24.5-30 | 30-8 | 4-18 | 18-24.5 | 24.5-40 | |
| | | | | GHz | | | | GHz | | | | |
| T40-40-40-1 | 2.92 Male | 2.92 Male | | | | | | | | | | |
| T40-40-40-2 | 2.92 Male | 2.92 Female | 395 | 0.9 | 1.1 | 1.9 | 2.0 | | | | | |
| T40-40-40-3 | 2.92 Female | 2.92 Female | 395 | 1.3 | 2.0 | 2.8 | 3.4 | 1.15 | 1.20 | 1.25 | 1.30 | |
| T40-39-39-1 | 2.4 Male | 2.4 Male | | | | | | | | | | |
| T40-39-40-1 | 2.4 Male | 2.4 Female | 1M | 1.4 | 2.4 | 5.0 | 5.0 | | | | | |
| T40-38-40-1 | 2.4 Female | 2.4 Female | | | | | | | | | | |

T50 Series DC~50GHz High Density and Reliable Test Cable

(Suited for high accuracy millimeter wave tests in production line & labs)

Features & Advantage

- Excellent phase & amplitude stability over flexure
- High shielding effectiveness < -90dB
- Construction is very robust, employing an advanced strain relief system
- Excellent attenuation performance
- Super flexible & durable
- Anti-compression & distortion

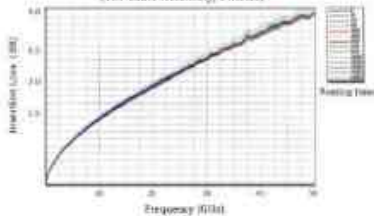
Application

- Test equipment connection
- High volume production / Lab test

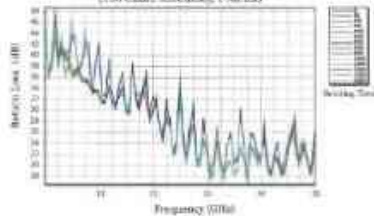
Electrical

| | |
|--------------------------------|----------------|
| Outer Diameter | 3.60mm |
| Jacket | FEP |
| Operating Frequency | 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 14.4mm |
| Insertion Loss (Max.) | 3.29dB/m@50GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over flex. | ±4°@50GHz |
| Amplitude Stability over Flex. | <±0.08dB@50GHz |
| Operating Temp. | 23±5 °C |
| Storage Temp. | -40 ~ +50 °C |

Insertion Loss Change over 20K Flex Cycles
(T50 Cable Assembly, 1 Meter)

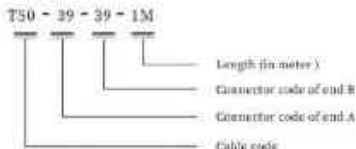


Return Loss Change over 20K Flex Cycles
(T50 Cable Assembly, 1 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code



Type 2.4 Male
P/N 2.4-E-04-00
Code 39
Mat. Stainless steel
Freq. 50GHz
VSWR 1.30:1



Type 2.4 Female
P/N 2.4-E-04-00
Code 48
Mat. Stainless steel
Freq. 50GHz
VSWR 1.30:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(d) | | | |
|-------------|----------------|-------------|-------------|---------------------------------|---------|---------|-------|---------|---------|---------|-------|
| | Connector 1 | Connector 2 | | 70-14 | 18-26.5 | 36.3-44 | 40-59 | 70-14 | 18-26.5 | 36.3-44 | 40-59 |
| T50-39-39-L | 2.4 Male | 2.4 Male | 2FT | 1.7 | 2.0 | 2.6 | 3.1 | | | | |
| T50-39-48-L | 2.4 Male | 2.4 Female | 2FT | 2.2 | 2.6 | 3.4 | 4.1 | 1.20 | 1.25 | 1.30 | 1.35 |
| T50-48-48-L | 2.4 Female | 2.4 Female | 1M | 2.4 | 3.0 | 3.8 | 4.4 | | | | |

T110 Series DC~110GHz High Reliability Test Cable Assemblies

(Suitable for production line / lab testing)

Features & Advantage

- Rugged configuration with super flexible stainless steel armor
- Negligible changes of phase & amplitude over flexure
- Excellent attenuation performance
- Double shielded prevention by high-shielding cable & armor (shielding effectiveness < -95dB)
- Guard against from salt spray, corrosion, extrusion & distortion
- Wide range of operation temp. at -65 ~ +165°C

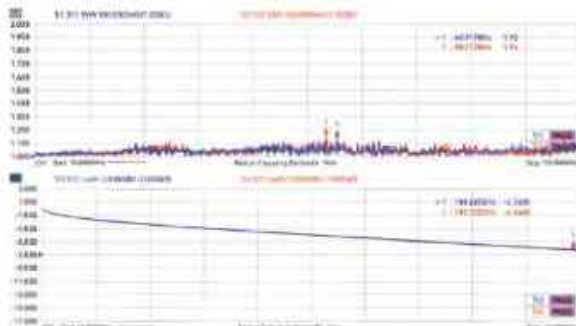
Application

- Production line / Lab testing
- MinWave equipment / Test instruments / System connections

Electrical

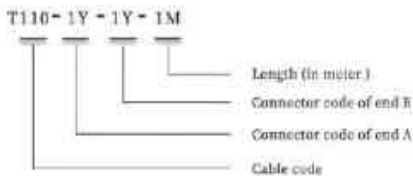
| | |
|--------------------------------|-----------------------|
| Outer Diameter | 3.00mm |
| Jacket | SS316 Stainless Steel |
| Operating Frequency | 110GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 25mm |
| VSWR(1) | 1.45@110GHz |
| Insertion Loss(Max.) | 15dB/m@110GHz |
| Shielding Effectiveness | <-95dB |
| Phase Stability over Flex. | ±8°@110GHz |
| Amplitude Stability over Flex. | <±0.10dB@110GHz |
| Operating Temp. | -65 ~ +165 °C |
| Storage Temp. | -65 ~ +165 °C |

Test Curve (0.4 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code



Type 1.0 Male
P/N LD-1-01-00
Code 1Y
Mat. Stainless steel
Freq. 110GHz
VSWR | 1.40:1



Type 1.0 Female
P/N LD-R-01-00
Code 1Z
Mat. Stainless steel
Freq. 110GHz
VSWR | 1.40:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length mm | Attenuation Insertion Loss (dB) | | | | | | VSWR (dB) | | | |
|-----------------|----------------|--------------|--------------|---------------------------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--|--|
| | Connector 1 | Connector 2 | | DC-40 GHz | 40-50 GHz | 50-67 GHz | 67-128 GHz | DC-30 GHz | 30-50 GHz | 50-67 GHz | 67-128 GHz | | |
| T110-1Y-1Y-0.3M | 1.0mm Male | 1.0mm Male | 0.3 | 2.9 | 3.2 | 3.5 | 3.3 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Y-1Y-0.5M | 1.0mm Male | 1.0mm Male | 0.5 | 4.4 | 3.6 | 3.6 | 3.3 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Y-1Y-1M | 1.0mm Male | 1.0mm Male | 1.0 | 8.2 | 3.4 | 3.4 | 3.1 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Y-1Z-0.3M | 1.0mm Male | 1.0mm Female | 0.3 | 2.9 | 3.3 | 3.5 | 3.3 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Y-1Z-0.5M | 1.0mm Male | 1.0mm Female | 0.5 | 4.4 | 3.6 | 3.6 | 3.2 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Y-1Z-1M | 1.0mm Male | 1.0mm Female | 1.0 | 8.2 | 3.4 | 3.4 | 3.1 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Z-1Z-0.3M | 1.0mm Female | 1.0mm Female | 0.3 | 2.9 | 3.3 | 3.5 | 3.3 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Z-1Z-0.5M | 1.0mm Female | 1.0mm Female | 0.5 | 4.4 | 3.6 | 3.6 | 3.2 | 1.30 | 1.30 | 1.30 | 1.30 | | |
| T110-1Z-1Z-1M | 1.0mm Female | 1.0mm Female | 1.0 | 8.2 | 3.4 | 3.4 | 3.1 | 1.30 | 1.30 | 1.30 | 1.30 | | |

T40E Series DC~40GHz Wide Temperature Range Test Cable

(Suited for high & low temperature cycling / Thermal shock tests)

Features & Advantage

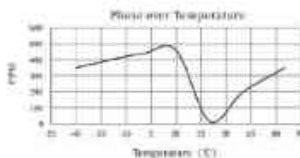
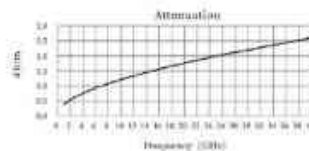
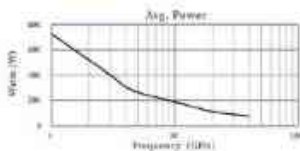
- Excellent mechanical performance & phase stability over temp.
- High shielding effectiveness & outstanding attenuation performance
- Construction is very robust, employing an advanced strain relief system
- Wide range of operation temp. at -65 ~ +165°C

Application

- High & low temp. cycling / Thermal shock tests for production line / Labs
- High-density test equipment connection
- High volume production test

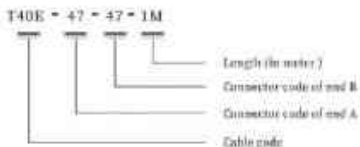
Electrical

| | |
|--------------------------------|-----------------|
| Outer Diameter | 3.60mm |
| Jacket | FEP |
| Operating Frequency | 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 20mm |
| Insertion Loss(Max.) | 2.61dB/m@40GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over flex. | ±4°@40GHz |
| Amplitude Stability over Flex. | < ±0.10dB@40GHz |
| Operating Temp. | -65 ~ +165°C |
| Storage Temp. | -65 ~ +165°C |

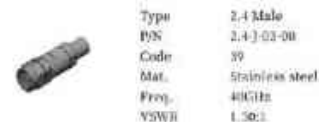


Connector & Assembly Information

Part Numbering Code



Connector Code



Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length m | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | | |
|-----------------|----------------|-------------|-------------|---------------------------------|---------|---------|------|------|---------|---------|------|--|
| | Connector 1 | Connector 2 | | GHz | | | | | GHz | | | |
| | | | DC-6 | 6-18 | 18-26.5 | 26.5-40 | DC-6 | 4-10 | 10-26.5 | 26.5-40 | | |
| T40E-30-40-1M | 2.92 Male | 2.92 Male | 1.0 | 1.2 | 2.1 | 2.8 | 3.8 | 1.15 | 1.30 | 1.30 | 1.35 | |
| T40E-40-40-1.5M | 2.92 Male | 2.92 Male | 1.5 | 1.6 | 2.0 | 2.8 | 4.7 | 1.15 | 1.30 | 1.30 | 1.35 | |
| T40E-30-46-1M | 2.92 Male | 2.92 Female | 1.0 | 1.2 | 2.1 | 2.8 | 3.8 | 1.20 | 1.30 | 1.30 | 1.35 | |
| T40E-40-46-1.5M | 2.92 Male | 2.92 Female | 1.5 | 1.6 | 2.0 | 2.8 | 4.7 | 1.20 | 1.30 | 1.30 | 1.35 | |
| T40E-39-39-1M | 2.4 Male | 2.4 Male | 1.0 | 1.2 | 2.1 | 2.8 | 3.8 | 1.15 | 1.30 | 1.30 | 1.35 | |
| T40E-39-39-1.5M | 2.4 Male | 2.4 Male | 1.5 | 1.6 | 2.0 | 2.8 | 4.7 | 1.15 | 1.30 | 1.30 | 1.35 | |

AT26 Series DC~26.5GHz

VA Armor Protected Test Cable Assemblies

(Qualified by over 300K flex cycles, well suited for repeat tests)

Features & Advantage

- **Flexible & durable, long life cycle**
- Reinforced connector, robust protection & ideal strain relief
- Multilayer armor structure to prevent cable from water, dust, extrusion & distortion
- Excellent phase & amplitude stability over bending, shaking & torsion
- Ideal VSWR & measurement accuracy

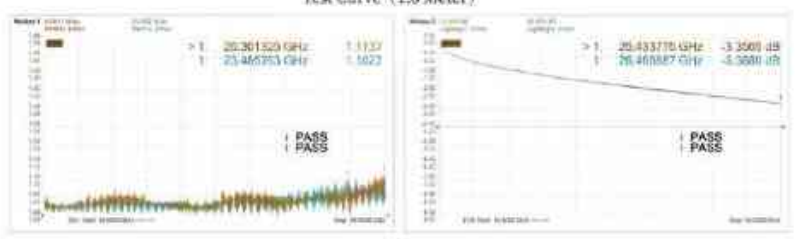
Application

- RF field test
- **High volume production test**
- Point to point equipment test
- Mobile / IPAD / WIFI / Base station testing
- Research & development labs

Electrical

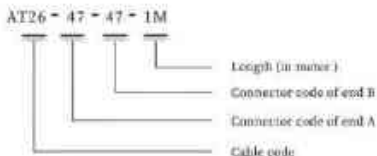
| | |
|--------------------------------|---|
| Outer Diameter | 8.00mm |
| Jacket | Stainless steel with spring + Silver plated copper wire + Waterproof glue + PTFE braided wire |
| Operating Frequency | DC-26.5GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 30mm |
| Insertion Loss(Max.) | 2.52dB/100@26.5GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over flex. | ±2°@26.5GHz |
| Amplitude Stability over flex. | < ±0.04dB@26.5GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -40 ~ +50 C |

Test Curve (1.6 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code



Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|--------------|----------------|-------------|-------------|---------------------------------|-----------|----------|-------------|------------|-----------|----------|-------------|
| | Connector 1 | Connector 2 | | DC-2.5 GHz | 2.5-6 GHz | 6-18 GHz | 18-36.5 GHz | DC-2.5 GHz | 2.5-6 GHz | 6-18 GHz | 18-36.5 GHz |
| AT26-01-01-L | SMA Male | SMA Male | 2FT | 0.7 | 0.9 | 1.0 | 2.2 | 1.12 | 1.15 | 1.25 | 1.30 |
| AT26-01-02-L | SMA Male | SMA Male | | | | | | | | | |
| AT26-02-02-L | SMA Female | SMA Female | 3FT | 0.9 | 1.0 | 2.4 | 3.0 | 1.12 | 1.15 | 1.25 | 1.30 |
| AT26-47-47-L | 3.5 Male | 3.5 Male | | | | | | | | | |
| AT26-47-00-L | 3.5 Male | 3.5 Male | 1M | 1.0 | 1.4 | 2.6 | 3.2 | 1.12 | 1.15 | 1.25 | 1.30 |
| AT26-46-46-L | 3.5 Female | 3.5 Female | | | | | | | | | |

AT40 Series DC~40GHz VA Armor Protected Test Cable Assemblies

(Qualified by over 20K flex cycles, well suited for repeat tests)

Features & Advantage

- Flexible & durable, long life cycle
- Reinforced connector, robust protection & ideal strain relief
- Multilayer armor structure to prevent cable from water, dust, extrusion & distortion
- Excellent phase & amplitude stability over bending, shaking & torsion
- Ideal VSWR & measurement accuracy

Application

- Millimeter wave test
- Point to point equipment test
- 5G test

Electrical

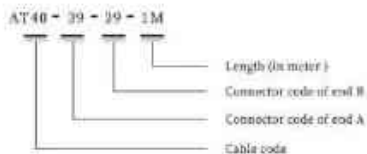
| | |
|--------------------------------|---|
| Outer Diameter | 6.00mm |
| Jacket | Stainless steel with spring + Silver plated copper wire + Waterproof glue + PTFE braided wire |
| Operating Frequency | 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 2.92dB/m@40GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over Flex. | ±3°@40GHz |
| Amplitude Stability over Flex. | < ±0.06dB@40GHz |
| Operating Temp. | 23±5°C |
| Storage Temp. | -40 ~ +50°C |

Test Curve (1.6 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code



Type: 2.92 Male
 P/N: 2.92-J-15-00
 Code: 40
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: 2.92 Male
 P/N: 2.92-J-15-00A
 Code: 400
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: 2.92 Female
 P/N: 2.92-K-09-00
 Code: 46
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: 2.92 Female
 P/N: 2.92-K-09-00A
 Code: 400
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | | |
|--------------|----------------|-------------|-------------|---------------------------------|------|---------|---------|---------|------|---------|---------|--|
| | Connector 1 | Connector 2 | | DC-6 | 6-18 | 18-26.3 | 26.5-40 | DC-6 | 6-18 | 18-26.3 | 26.5-40 | |
| AT00-03-40-L | 2.92 Male | 2.92 Male | | | | | | | | | | |
| AT00-03-40-L | 2.92 Male | 2.92 Female | | | | | | | | | | |
| AT00-03-40-L | 2.92 Female | 2.92 Female | 0PT | 0.5 | 1.7 | 2.8 | 3.5 | | | | | |
| AT00-39-39-L | 2.4 Male | 2.4 Male | 0PT | 1.2 | 3.3 | 5.4 | 6.6 | 1.15 | 1.25 | 1.35 | 1.50 | |
| AT00-39-48-L | 2.4 Male | 2.4 Female | 1M | 1.9 | 2.9 | 3.8 | 4.8 | | | | | |
| AT00-39-48-L | 2.4 Female | 2.4 Female | | | | | | | | | | |

AT50 Series DC~50GHz VA Armor Protected Test Cable Assemblies

(Qualified by over 20K flex cycles, well suited for repeat tests)

Features & Advantage

- Flexible & durable, long life cycle
- Reinforced connector, robust protection & ideal strain relief
- Multilayer armor structure to prevent cable from water, dust, extrusion & distortion
- Excellent phase & amplitude stability over bending, shaking & torsion
- Ideal VSWR & measurement accuracy

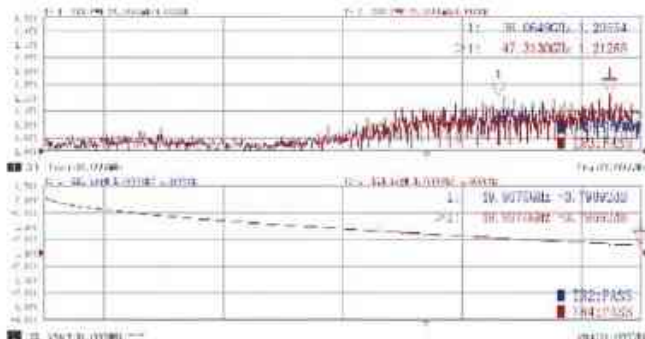
Application

- Millimeter wave test cable
- Point to point equipment test
- 5G test

Electrical

| | |
|--------------------------------|---|
| Outer Diameter | 6.00mm |
| Jacket | Stainless steel with spring + Silver plated copper wire + Waterproof glue + PTFE braided wire |
| Operating Frequency | 50GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 3.29dB/m@50GHz |
| Shielding Effectiveness | <-99dB |
| Phase Stability over flex. | +4°@50GHz |
| Amplitude Stability over Flex. | <+0.08dB@50GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -40 ~ +50 C |

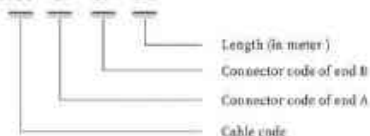
Test Curve (1.05 Meter)







Connector & Assembly Information

Part Numbering Code

AT50 - 39 - 39 - 1M



Connector Code

| | | | |
|---|--|---|--|
|  | Type: 2.4 Male P/N: 2.4-J-02-00 Code: 39 Mat: Stainless steel Freq.: 50GHz VSWR: 1.25:1 |  | Type: 2.4 Male P/N: 2.4-J-16-00A Code: 39I Mat: Stainless steel Freq.: 50GHz VSWR: 1.25:1 |
|  | Type: 2.4 Female P/N: 2.4-K-09-00 Code: 48 Mat: Stainless steel Freq.: 50GHz VSWR: 1.25 |  | Type: 2.4 Female P/N: 2.4-K-16-00A Code: 48I Mat: Stainless steel Freq.: 50GHz VSWR: 1.25 |

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(dB) | | | | |
|----------------|----------------|-------------|-------------|---------------------------------|---------|---------|-------|----------|---------|---------|-------|--|
| | Connector 1 | Connector 2 | | DC-18 | 18-26.5 | 26.5-40 | 40-50 | DC-18 | 18-26.5 | 26.5-40 | 40-50 | |
| AT30-20-20-DFT | 2.4 Male | 2.4 Male | | | | | | | | | | |
| AT30-20-20-DFT | 2.4 Male | 2.4 Male | | | | | | | | | | |
| AT30-20-20-1M | 2.4 Male | 2.4 Male | | | | | | | | | | |
| AT30-20-16-DFT | 2.4 Male | 2.4 Female | 2FT | 0.9 | 2.0 | 1.8 | 0.1 | | | | | |
| AT30-20-16-DFT | 2.4 Male | 2.4 Female | 3FT | 1.0 | 2.0 | 1.8 | 0.1 | 1.18 | 1.20 | 1.18 | 1.16 | |
| AT30-20-16-1M | 2.4 Male | 2.4 Female | 3M | 1.4 | 2.0 | 1.8 | 1.4 | | | | | |
| AT30-16-16-DFT | 2.4 Female | 2.4 Female | | | | | | | | | | |
| AT50-16-16-DFT | 2.4 Female | 2.4 Female | | | | | | | | | | |
| AT30-16-16-1M | 2.4 Female | 2.4 Female | | | | | | | | | | |

AT67 Series DC~67GHz VA Armor Protected Test Cable Assemblies

(Qualified by over 20K flex cycles, well suited for repeat tests)

Features & Advantage

- Flexible & durable, long life cycle
- Reinforced connector, robust protection & ideal strain relief
- Multilayer armor structure to prevent cable from water, dust, extrusion & distortion
- Excellent phase & amplitude stability over bending, shaking & torsion
- Ideal VSWR & measurement accuracy

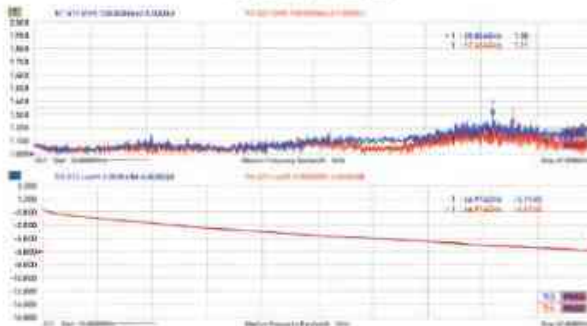
Application

- Millimeter wave test
- Point to point equipment test
- 5G test

Electrical

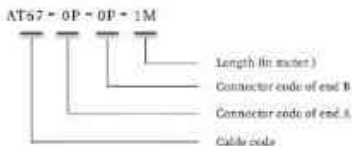
| | |
|--------------------------------|---|
| Outer Diameter | 5.00mm |
| Jacket | Stainless steel with spring + Silver plated copper wire + Waterproof glue + PTFE braided wire |
| Operating Frequency | 67GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 30mm |
| Insertion Loss(Max.) | 6.2dB/m@67GHz |
| Shielding Effectiveness | < -100dB |
| Phase Stability over flex. | ±3°@67GHz |
| Amplitude Stability over Flex. | < ±0.15dB@67GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -40 ~ +50 C |

Test Curve (1.0 Meter)



Connector & Assembly Information

Part Numbering Code



Connector Code



Type 1.85 Male
P/N 1.85-J-07-00
Code 0P
Mat. Stainless steel
Freq. 67GHz
VSWR 1.25:1



Type 1.85 Male
P/N 1.85-J-07-00A
Code 0P0
Mat. Stainless steel
Freq. 67GHz
VSWR 1.25:1



Type 1.85 Female
P/N 1.85-K-03-00
Code 0Y
Mat. Stainless steel
Freq. 67GHz
VSWR 1.25:1



Type 1.85 Female
P/N 1.85-K-03-00A
Code 0Y0
Mat. Stainless steel
Freq. 67GHz
VSWR 1.25:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | | |
|----------------|----------------|-------------|--------|---------------------------------|-------|-------|-------|-------|---------|-------|-------|-------|
| | Connector 1 | Connector 2 | | 1 | 10-15 | 15-45 | 45-75 | 75-67 | 100-15 | 15-45 | 45-50 | 50-67 |
| AT57-0P-0P-2FT | 1.85 Male | 1.85 Male | | | | | | | | | | |
| AT57-0P-0P-3FT | 1.85 Male | 1.85 Male | | | | | | | | | | |
| AT57-0P-0P-1M | 1.85 Male | 1.85 Male | | | | | | | | | | |
| AT57-0P-0Y-2FT | 1.85 Male | 1.85 Female | 2FT | 2.2 | 3.4 | 4.1 | 4.6 | | | | | |
| AT57-0P-0Y-3FT | 1.85 Male | 1.85 Female | 3FT | 3.8 | 5.1 | 5.9 | 6.1 | 1.25 | 1.20 | 1.20 | 1.25 | |
| AT57-0P-0Y-1M | 1.85 Male | 1.85 Female | 1M | 3.4 | 3.1 | 3.4 | 3.9 | | | | | |
| AT57-0Y-0Y-2FT | 1.85 Female | 1.85 Female | | | | | | | | | | |
| AT57-0Y-0Y-3FT | 1.85 Female | 1.85 Female | | | | | | | | | | |
| AT57-0Y-0Y-1M | 1.85 Female | 1.85 Female | | | | | | | | | | |

AT110 Series DC~110GHz VA Armor Protected Test Cable Assemblies

(Qualified by over 20K flex cycles, well suited for repeat tests)

Features & Advantage

- Flexible & durable, long life cycle
- Reinforced connector, robust protection & ideal strain relief
- Multilayer armor structure to prevent cable from water, dust, extrusion & distortion
- Excellent phase & amplitude stability over bending, shaking & torsion
- Ideal VSWR & measurement accuracy

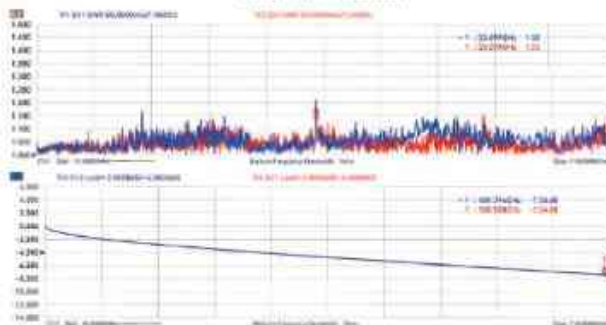
Application

- 110GHz millimeter wave test cable
- Equipment and system connection

Electrical

| | |
|--------------------------------|---|
| Outer Diameter: | 5.00mm |
| Jacket | Stainless steel with spring + Silver plated copper wire + Waterproof glue + PTFE braided wire |
| Operating Frequency | 110GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 30mm |
| Insertion Loss(Max.) | 15dB/m@110GHz |
| Shielding Effectiveness | <-100dB |
| Phase Stability over flex. | +8°@110GHz |
| Amplitude Stability over flex. | <+0.2dB@110GHz |
| Operating Temp. | 23±5 C |
| Storage Temp. | -45 ~ +85 C |

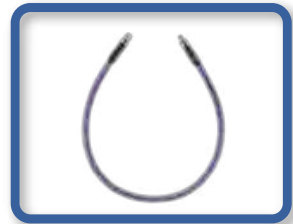
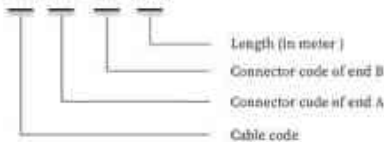
Test Curve (0.5 Meter)



Connector & Assembly Information

Part Numbering Code

AT110-1Y-1Y-0.5M



Connector Code



Type: 1.0 Male
 P/N: 1.0-K-03-00
 Code: 1Y
 Mat.: Stainless steel
 Freq.: 110GHz
 VSWR: 1.25:1



Type: 1.0 Female
 P/N: 1.0-K-03-00
 Code: 1Z
 Mat.: Stainless steel
 Freq.: 110GHz
 VSWR: 1.25:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length in | Attenuation Insertion Loss (dB) | | | | | VSWR(1) | | | |
|------------------|----------------|--------------|--------------|---------------------------------|-------|-------|--------|-------|---------|-------|--------|--|
| | Connector 1 | Connector 2 | | DC-40 | 40-50 | 50-67 | 67-118 | DC-40 | 40-50 | 50-67 | 67-118 | |
| AT110-1Y-1Y-0.5M | 1.0mm Male | 1.0mm Male | 5.5 | 2.4 | 3.5 | 3.9 | 5.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-1Y-1Y-0.5M | 1.0mm Male | 1.0mm Male | 5.5 | 3.1 | 3.8 | 6.8 | 8.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-1Y-1Y-0.5M | 1.0mm Male | 1.0mm Male | 1.0 | 8.1 | 9.4 | 11.1 | 16 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-1Y-0Z-0.5M | 1.0mm Male | 1.0mm Female | 6.1 | 2.1 | 3.1 | 3.9 | 5.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-1Y-0Z-0.5M | 1.0mm Male | 1.0mm Female | 6.5 | 4.4 | 5.1 | 6.5 | 8.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-1Y-0Z-1M | 1.0mm Male | 1.0mm Female | 1.0 | 8.7 | 9.4 | 11.1 | 16 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-0Z-0Z-0.5M | 1.0mm Female | 1.0mm Female | 5.5 | 2.8 | 3.1 | 3.9 | 5.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-0Z-0Z-0.5M | 1.0mm Female | 1.0mm Female | 5.5 | 4.1 | 5.8 | 6.8 | 8.5 | 1.25 | 1.25 | 1.30 | 1.30 | |
| AT110-0Z-0Z-1M | 1.0mm Female | 1.0mm Female | 1.0 | 8.1 | 9.4 | 11.1 | 16 | 1.25 | 1.25 | 1.30 | 1.30 | |

VNA26 Series DC~26.5GHz Flexible Test Cable for Vector Network Analyzer

(Suited for high accuracy & long life tests)

Features & Advantage

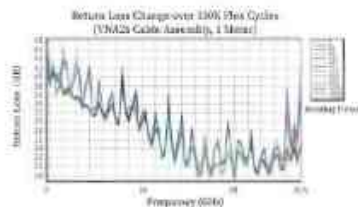
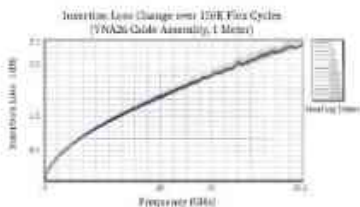
- Negligible changes of phase & amplitude after flexing
- Extra rugged & long-life performance
- Construction is very robust, employing an advanced strain relief system

Application

- High stability for precision testing
- Anti-compression & distortion

Electrical

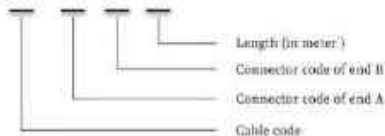
| | |
|--------------------------------|------------------|
| Outer Diameter | 15.30mm |
| Operating Frequency | 26.5GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 2.52dB/m@26.5GHz |
| Shielding Effectiveness | <90dB |
| Phase Stability over flex. | ±2°@26.5GHz |
| Amplitude Stability over Flex. | ±0.04dB@26.5GHz |
| Operating Temp. | 23±5 °C |
| Storage Temp. | -40~+55 °C |



Connector & Assembly Information

Part Numbering Code

VNA26 - 47 - 83 - 1M



Connector Code

| | |
|---|---|
|  | Type: SMD3.5 Male P/N: SMD3.5-J-02-00 Code: 47 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.20:1 |
|---|---|

| | |
|---|---|
|  | Type: SMD3.5 Female P/N: SMD3.5-K-01-00 Code: 60 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.25:1 |
|---|---|

| | |
|---|---|
|  | Type: N Male P/N: N-J-15-00 Code: 07 Mat.: Stainless steel Freq.: 18GHz VSWR: 1.20:1 |
|---|---|

| | |
|---|---|
|  | Type: NMD3.5 Female P/N: NMD3.5-K-02-00 Code: 83 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.25:1 |
|---|---|

| | |
|---|---|
|  | Type: NMD3.5 Male P/N: NMD3.5-J-01-00 Code: 08 Mat.: Stainless steel Freq.: 26.5GHz VSWR: 1.20:1 |
|---|---|

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|---------------|----------------|---------------|-------------|---------------------------------|------|-------|---------|---------|------|-------|---------|
| | Connector 1 | Connector 2 | | 50-5 | 6-12 | 12-18 | 18-26.5 | 50-5 | 6-12 | 12-18 | 18-26.5 |
| VNA26-17-23-L | SMD3.5 Male | SMD3.5 Female | 187 | 0.6 | 1.4 | 1.8 | 2.2 | | | | |
| VNA26-19-43-L | SMD3.5 Female | NMD3.5 Female | 187 | 1.2 | 1.9 | 2.4 | 2.8 | 0.11 | 0.15 | 0.20 | 0.20 |
| VNA26-17-09-L | SMD3.5 Male | NMD3.5 Male | 154 | 1.4 | 2.0 | 2.6 | 3.2 | | | | |
| VNA26-19-03-L | SMD3.5 Female | NMD3.5 Male | | | | | | | | | |

VNA40 Series DC~40GHz Flexible Test Cable for Vector Network Analyzer

(Suited for high accuracy & long life tests)

Features & Advantage

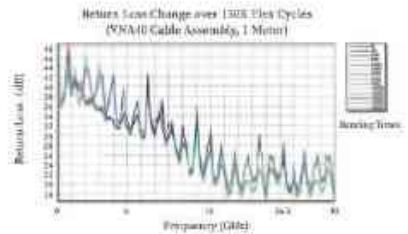
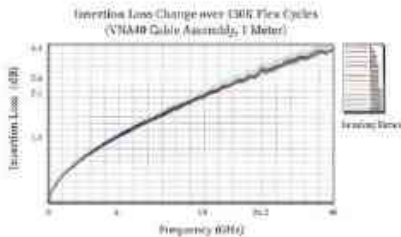
- Negligible changes of phase & amplitude after flexing
- Extra rugged & long-life performance
- Construction is very robust, employing an advanced strain relief system

Application

- High stability for precision testing
- Anti-compression & distortion

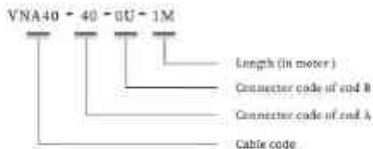
Electrical

| | |
|--------------------------------|----------------|
| Outer Diameter | 15.30mm |
| Operating Frequency | 40GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 2.92dB/m@40GHz |
| Shielding Effectiveness | <-90dB |
| Phase Stability over flex. | ±3°@40GHz |
| Amplitude Stability over Flex. | <±0.06dB@40GHz |
| Operating Temp. | 22±5 °C |
| Storage Temp. | -40~+50 °C |



Connector & Assembly Information

Part Numbering Code



Connector Code



Type: SMD2.92 Female
 P/N: SMD2.92-E-01-00
 Code: 46
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: SMD2.92 Male
 P/N: SMD2.92-I-01-00
 Code: 40
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: NMD2.92 Male
 P/N: NMD2.92-I-01-00
 Code: 0V
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1



Type: NMD2.92 Female
 P/N: NMD2.92-E-01-00
 Code: 0U
 Mat.: Stainless steel
 Freq.: 40GHz
 VSWR: 1.25:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(1) | | | |
|---------------|-----------------|-----------------|-------------|---------------------------------|----------|-----------|-----------|---------|----------|-----------|-----------|
| | Connector 1 | Connector 2 | | DC-0 | 0-10 GHz | 10-20 GHz | 20-30 GHz | DC-0 | 0-10 GHz | 10-20 GHz | 20-30 GHz |
| VNA40-40-00-0 | SMD 2.92 Male | SMD 2.92 Female | 300 | 0.0 | 1.7 | 2.0 | 2.4 | | | | |
| VNA40-40-00-0 | SMD 2.92 Female | NMD 2.92 Female | 300 | 1.0 | 1.2 | 2.2 | 3.4 | 1.15 | 1.20 | 1.25 | 1.28 |
| VNA40-40-00-0 | SMD 2.92 Male | SMD 2.92 Male | 100 | 1.0 | 1.4 | 1.8 | 2.2 | | | | |
| VNA40-40-00-0 | SMD 2.92 Female | NMD 2.92 Male | 100 | 1.0 | 1.4 | 1.8 | 2.2 | | | | |

VNA50 Series DC~50GHz Flexible Test Cable for Vector Network Analyzer

(Suited for high accuracy & long life tests)

Features & Advantage

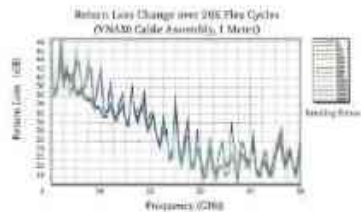
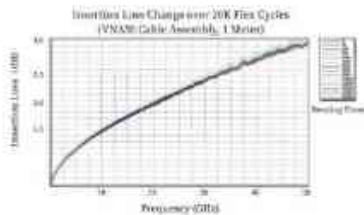
- Negligible changes of phase & amplitude after flexing
- Extra rugged & long-life performance
- Construction is very robust, employing an advanced strain relief system

Application

- High stability for precision testing
- Anti-compression & distortion

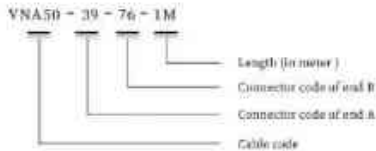
Electrical

| | |
|--------------------------------|-----------------|
| Outer Diameter | 15.88mm |
| Operating Frequency | 50GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 3.5dB/m@50GHz |
| Shielding Effectiveness | < -90dB |
| Phase Stability over Flex. | ±4°@50GHz |
| Amplitude Stability over Flex. | < ±0.08dB@50GHz |
| Operating Temp. | 22±5°C |
| Storage Temp. | -40 ~ +50°C |



Connector & Assembly Information

Part Numbering Code



Connector Code



Type: SMD2.4 Male
P/N: SMD2.4-J-02-00
Code: 39
Mat: Stainless steel
Freq: 50GHz
VSWR: 1.20:1



Type: SMD2.4 Female
P/N: SMD2.4-K-02-00
Code: 48
Mat: Stainless steel
Freq: 50GHz
VSWR: 1.30:1



Type: NMD2.4 Female
P/N: NMD2.4-K-02-00
Code: 76
Mat: Stainless steel
Freq: 50GHz
VSWR: 1.30:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR(dB) | | | |
|-----------------|----------------|---------------|-------------|---------------------------------|---------|---------|-------|----------|---------|---------|-------|
| | Connector 1 | Connector 2 | | DC-18 | 18-20.8 | 20.8-30 | 30-50 | DC-18 | 18-20.8 | 20.8-30 | 30-50 |
| YNA30-09-76-2FT | SMD2.4 Male | NMD2.4 Female | | | | | | | | | |
| YNA30-39-76-3FT | SMD2.4 Male | SMD2.4 Female | 3FT | 1.7 | 2.0 | 2.0 | 2.3 | | | | |
| YNA30-09-76-1M | SMD2.4 Male | SMD2.4 Female | 2FT | 2.3 | 2.8 | 2.8 | 3.1 | 1.20 | 1.25 | 1.20 | 1.20 |
| YNA30-09-76-2FT | SMD2.4 Female | NMD2.4 Female | 1M | 2.4 | 3.0 | 3.0 | 3.4 | | | | |
| YNA30-09-76-3FT | SMD2.4 Female | SMD2.4 Female | | | | | | | | | |
| YNA30-09-76-1M | SMD2.4 Female | NMD2.4 Female | | | | | | | | | |

VNA67 Series DC~67GHz Flexible Test Cable for Vector Network Analyzer

(Suited for high accuracy & long life tests)

Features & Advantage

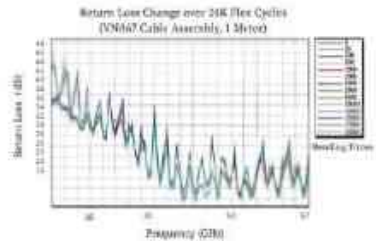
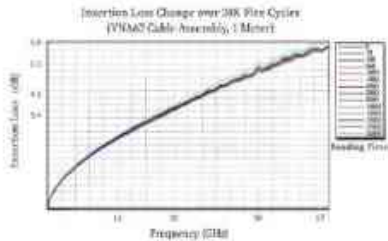
- Negligible changes of phase & amplitude after flexing
- Extra rugged & long-life performance
- Construction is very robust, employing an advanced strain relief system

Application

- High stability for precision testing
- Anti-compression & distortion

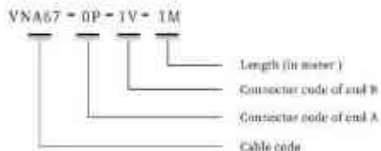
Electrical

| | |
|--------------------------------|---------------|
| Outer Diameter | 15.36mm |
| Operating Frequency | 67GHz |
| Impedance | 50Ω |
| Min. Bending Radius | 50mm |
| Insertion Loss(Max.) | 6.2dB/m@67GHz |
| Shielding Effectiveness | < -100dB |
| Phase Stability over flex. | ±2°@67GHz |
| Amplitude Stability over Flex. | ±±0.1dB@67GHz |
| Operating Temp. | 23±5°C |
| Storage Temp. | -40 ~ +50°C |



Connector & Assembly Information

Part Numbering Code



Connector Code



Type: SMA1.85 Male
 P/N: SMA1.85-J-02-00
 Code: 0P
 Mat.: Stainless Steel
 Freq.: 67GHz
 VSWR: 1.25:1



Type: SMA1.85 Female
 P/N: SMA1.85-K-02-00
 Code: 0F
 Mat.: Stainless Steel
 Freq.: 67GHz
 VSWR: 1.25:1



Type: NMD1.85 Female
 P/N: NMD1.85-K-02-00
 Code: 1V
 Mat.: Stainless Steel
 Freq.: 67GHz
 VSWR: 1.25:1

Standard Type & Technical Specifications (Fast delivery within 1 week)

| Model | Connector Type | | Length L | Attenuation Insertion Loss (dB) | | | | VSWR (±1) | | | | |
|-----------------|----------------|----------------|-------------|---------------------------------|-------|-------|-------|-----------|-------|-------|-------|--|
| | Connector 1 | Connector 2 | | 5G-18 | 18-40 | 45-55 | 55-67 | 5G-18 | 18-40 | 45-55 | 55-67 | |
| | | | | GHz | | | | GHz | | | | |
| VNA67-0P-1V-2P7 | SMA1.85 Male | SMD1.85 Female | | | | | | | | | | |
| VNA67-0P-1V-3P7 | SMA1.85 Male | SMD1.85 Female | | | | | | | | | | |
| VNA67-0P-1V-1M | SMA1.85 Male | SMD1.85 Female | 3P7 | 2.2 | 5.0 | 4.1 | 4.5 | 1.25 | 1.25 | 1.25 | 1.25 | |
| VNA67-0P-1V-2P7 | SMD1.85 Female | SMD1.85 Female | 3P7 | 3.2 | 5.1 | 5.9 | 6.1 | | | | | |
| VNA67-0P-1V-3P7 | SMD1.85 Female | SMD1.85 Female | 1M | 3.4 | 5.3 | 6.0 | 6.5 | | | | | |
| VNA67-0P-1V-1M | SMD1.85 Female | SMD1.85 Female | | | | | | | | | | |

High Reliable & Performance Multi-Pin Connector Harness Assemblies



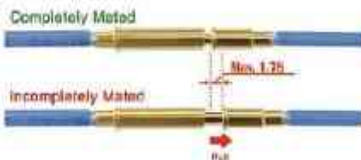
Advantages & Features:

- Excellent Electrical Performance
- **$VSWR < 1.40:1 @ 50GHz$**
- No Performance Changes at Incomplete Mating Condition
- Multi Channels, Small Size, Light Weight, Easy to Install
- Available for Phase Matching

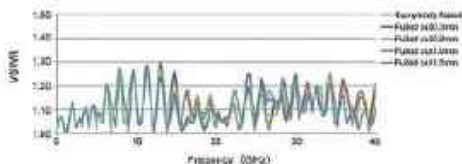
Applications:

- Military & Commercial Antenna Array Systems
- High Speed Data Transmission
- Other Integrated Applications

Allowed Incomplete Mating Interface



VSWR vs. Different Mating Interface



Push-pull-latching Multi-pin Coaxial Harness Assemblies

DC~40GHz

Feature & Advantage:

- Security of the Push-pull Self-latching System
- Consistent Impedance and Excellent VSWR:
 $<1.30:1 @20\text{GHz}$, $<1.40:1@40\text{GHz}$
- 360° Screening for Full EMC Shielding
- High Packing Density for Space Savings
- Allowed Incomplete Mating Interface: 2mm



Application:

- Military & Commercial Telecommunication System
- EMI & EMC
- Portable Instrument





NEW
19-Pin *High Performance*
D38999 Multi-Coax Cable Assemblies



Advantages & Features

- † Ultra Wide Frequency Range: **DC – 40GHz**
- † Excellent Electrical Performance: **VSWR<1.35:1@40GHz**
- † D38999III Series Tri-Start Quick Coupling & Self Lock
- † No Performance Changes at Incomplete Mating Condition
- † Available for Phase Matching



Applications

- † Military & Commercial Antenna Array Systems
- † High Speed Data Transmission
- † 5G Test





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Thank You

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