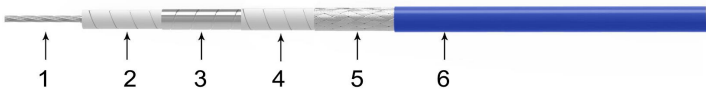
Ultra-Flexible Phase Stable Low Loss Cable FU520 Rev3

Features & Benefits

- Ultra-flexible with stranded inner conductor
- Available in ruggedized armor
- Multi-layer protection, robust for test use
- Very good phase stability over flexure<±5º to 26.5GHz

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	1.02	Stranded silver plated copper
2	Dielectric	3.03	LD PTFE wrapping
3	Outer Conductor	3.22	Silver plated copper strip wrapping
4	Interlayer	3.47	PTFE
5	Outer Shield	4.05	Silver plated copper wire braiding
6	Jacket	5.20	PUR or FEP

Electrical

Frequency	DC-26.5 GHz
Impedance	50 Ω
Velocity of Propagation	76%
Shielding Effectiveness	>90 dB
Withstanding Voltage	2000 V
*Mechanical Phase Stability	<±4º@18GHz, <±5º@26.5GHz
Amplitude Stability vs Shaking	<±0.1dB

* Wrapped 360˚ around a 52mm radius mandrel.

Mechanical & Environmental

Min.Bending Radius Static	18mm
Min. Bending Radius Repeated	50mm
Weight	55g/m
Operation Temp(PUR Jacket)	-50～85 ºC
Operation Temp(FEP Jacket)	-50～150 ºC

Attenuation(Typical@25℃&VSWR=1.0) & Power(VSWR=1.0; 40℃; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	20.4	38.5	55.9	82.0	103.2	121.9	139.0	154.9	169.9	184.2	198.0	252.1
Avg.Power kW	0.830	0.441	0.304	0.207	0.164	0.139	0.122	0.110	0.100	0.092	0.086	0.067

Attenuation at any frequency=[1.136600×SQRT(FMHz)]+[0.002530×FMHz]

Available connectors

Cable P/N	Connectors	Gender	Orientation	Mounting	Max Freq.(GHz)	VSWR Max
FU520	SMA	Male	Straight	Standard	26.5	1.25
FU520	SMA	Male	Right Angle	Standard	26.5	1.35
FU520	N	Male	Straight	Standard	18	1.3
FU520	N	Male	Right Angle	Standard	18	1.4
FU520	TNC	Male	Straight	Standard	18	1.35

Other connectors available upon request.