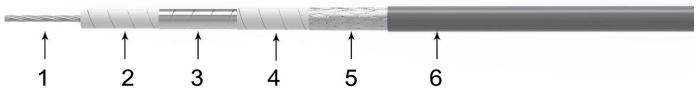
Ultra-Flexible Phase Stable Low Loss Cable

FU800 Rev1

Features & Benefits

- Excellent phase stability with flexure 18 GHz ≤5°
- High power handling
- Temperature phase stability＜500ppm(-40℃ to +85℃）
- Longer flex life with stranded center conductor

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	2.30	Stranded silver plated copper
2	Dielectric	6.00	Low density PTFE
3	Outer Conductor	6.33	Silver plated copper strip wrapping
4	Interlayer	6.60	PTFE
5	Outer Shield	7.05	Silver plated copper wire braiding
6	Jacket	7.70	FEP

Electrical

Frequency	DC-18 GHz
Impedance	50 Ω
Velocity of Propagation	83%
Shielding Effectiveness	>90 dB
Withstanding Voltage	2500 V
*Mechanical Phase Stability	<±5°
Amplitude Stability vs Shaking	<±0.15dB
Temp Phase Stability	<500ppm(-40℃ to +85℃)

* Wrapped 360° around a 80mm radius mandrel.

Mechanical & Environmental

Min.Bending Radius Static	40mm
Min. Bending Radius Repeated	80mm
Weight	124g/m
Temperature(Operation)	-55～125 ºC
Temperature(Storage)	-65～125 ºC

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

Frequency MHz	300	1000	2000	3000	6000	8000	10000	12000	14000	16000	18000
dB/100 Meter	9.8	18.1	25.9	31.9	45.8	53.4	60.1	66.2	71.9	77.3	82.4
Avg.Power kW	3.340	1.811	1.269	1.029	0.717	0.616	0.547	0.496	0.457	0.425	0.399

Attenuation at any frequency＝[0.561347×SQRT(FMHz)]+[0.000393×FMHz]

Available connectors

Cable P/N	Connectors	Gender	Orientation	Mounting	Max Freq.(GHz)	VSWR Max
FU800	SMA	M/F	Straight	Standard	18	1.3
FU800	SMA	Male	Right Angle	Standard	18	1.35
FU800	N	M/F	Straight	Standard	18	1.3
FU800	N	Male	Right Angle	Standard	18	1.35
FU800	TNC	M/F	Straight	Standard	18	1.35
FU800	TNC	Male	Right Angle	Standard	18	1.4
FU800	DIN 7/16	Male	Straight	Standard	6	1.3

Other connectors available upon request.