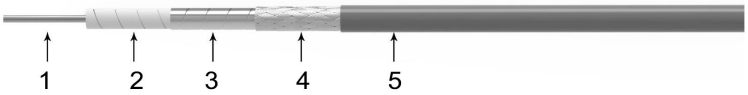
Ultra-Low Loss Phase and Amplitude Stable Flexible Cable LP800 Rev3

Features & Benefits

- Excellent phase stability with flexure 18 GHz ≤5°
- High power handling
- Temperature phase stability＜500ppm(-40℃ to +85℃）
- Alternative to SUCOFLEX106, CXN3450,UFB311A

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	2.30	Solid silver-plated copper
2	Dielectric	6.30	Ultra-low density PTFE
3	Outer Conductor	6.50	Silver-plated copper tape wrap
4	Outer Sheild	7.10	Silver-plated copper wire braid
5	Jacket	7.85	FEP

Electrical

Frequency	DC-18 GHz
Impedance	50 Ω
Velocity of Propagation	83%
Shielding Effectiveness	>90 dB
Withstanding Voltage	2000 V
*Mechanical Phase Stability	<±5°
Amplitude Stability vs Shaking	<±0.1dB
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	130g/m
Temperature(Operation)	-55～150 ºC
Temperature(Storage)	-60～160 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	8.0	14.8	21.1	26.0	37.3	43.4	48.9	53.9	58.6	63.0	67.1
Avg.Power kW	3.341	1.812	1.269	1.029	0.716	0.615	0.547	0.496	0.456	0.425	0.398

Attenuation at any frequency＝[0.456380×SQRT(FMHz)]+[0.000328×FMHz]

Available connectors

Cable P/N	Connectors	Gender	Orientation	Mounting	Max Freq.(GHz)	VSWR Max
LP800	SMA	M/F	Straight	Standard	18	1.3
LP800	SMA	Male	Right Angle	Standard	18	1.35
LP800	N	M/F	Straight	Standard	18	1.3
LP800	N	Male	Right Angle	Standard	18	1.35
LP800	TNC	M/F	Straight	Standard	18	1.35
LP800	TNC	Male	Right Angle	Standard	18	1.4
LP800	DIN 7/16	Male	Straight	Standard	6	1.3

Other connectors available upon request.