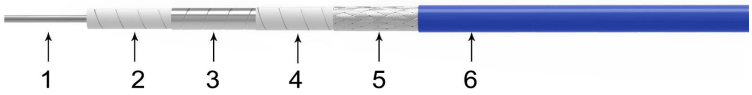
Ultra-Low Loss Phase and Amplitude Stable Flexible Cable PL180P Rev3

Features & Benefits

- VSWR Max 1.45 up to 110GHz
- Good mechanical phase stability vs flexing
- Available in armor options
- Triple-shielding for increased durability
- Customized lengths available

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	0.29	Silver plated copper
2	Dielectric	0.94	PTFE
3	Outer Conductor	1.06	Silver-plated copper tape wrap
4	Interlayer	1.20	PTFE
5	Outer Shield	1.50	Silver-plated copper wire braid
6	Jacket	1.80	FEP

Electrical

Frequency	DC-110 GHz
Impedance	50 Ω
Velocity of Propagation	82%
Shielding Effectiveness	>90 dB
Withstanding Voltage	500 V
*Mechanical Phase Stability	<±12º@110GHz
Amplitude Stability vs Shaking	<±0.2dB@110GHz
Temp Phase Stability	<1500ppm(-40℃ to +85℃)

* Wrapped 360˚ around a 18mm diameter mandrel.

Mechanical & Environmental

Min.Bending Radius Static	10mm
Min. Bending Radius Repeated	20mm
Weight	9g/m
Temperature(Operation)	-50～125 ºC
Temperature(Storage)	-60～125 ºC

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

Frequency MHz	300	1000	2000	3000	6000	12000	16000	18000	26500	40000	67000	110000
dB/Meter	0.6	1.1	1.6	2.0	2.8	4.0	4.7	5.0	6.1	7.6	10.0	13.1
Avg.Power W	61.0	33.0	24.0	19.0	14.0	10.0	8.0	8.0	6.0	5.0	4.0	3.0

Attenuation at any frequency＝ { [3.557846×SQRT(FMHz)]+[0.001221×FMHz] } /100

Available connectors

Cable P/N	Connectors	Gender	Orientation	Mounting	Max Freq.(GHz)	VSWR Max
PL180P	1mm	Male	Straight	Standard	110	1.45

Other connectors available upon request.