

Armored Bench Test Cable Assembly, Using PL180P

DC-110 GHz, 1.0mm Male to 1.0mm Male

PL180P-1M1M-L-A(L:Length)



• Length can be in meter or in inch etc, e.g, PL180P-1M1M-10CM-A. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.

• Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	1.0mm male	Connector 2	1.0mm male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	PL180P with armor		

Cable and Armor Construction



		5
3	Outer Conductor	Silver-plated copper tape wrap
4	Interlayer	Low density PTFE
5	Outer Shield	Silver-plated copper wire braid
6	Inner Jacket	FEP
7	Crush Resistance Layer	Stainless steel spiral
8	Strengthening Layer	Silver plated copper braid
9	Waterproof Layer	PTFE Binder
10	Armor Jacket	Braiding PTFE



Mechanical & Environmental

Electrical

Frequency	DC-110 GHz	Min.Bending Radius Static	20mm					
mpedance	50 Ω	Min. Bending Radius Repeated	40mm					
/SWR Max	1.35	Flex Life Min	20000 cycles					
L Max(10 cm assembly)	2.6dB	Temperature(Operation)	-50~85 °C					
/elocity of Propagation	82%	Temperature(Storage)	-60~85 °C					
Mechanical Phase Stability	<±12º@110GHz (Wrapped 360° around a 40mm diameter mandrel.)							
Amplitude Stability vs Shaking	<±0.2dB@110GHz							
Temp Phase Stability	<1500ppm(-40℃ to +85℃)							

Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; 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													

Notes:

1) The above attenuation refers to typical loss of cable only. Insertion loss per connector is estimated as 0.06dB x SQRT Freq(GHz).

2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (PL180P-1M1M-10CM-A)

