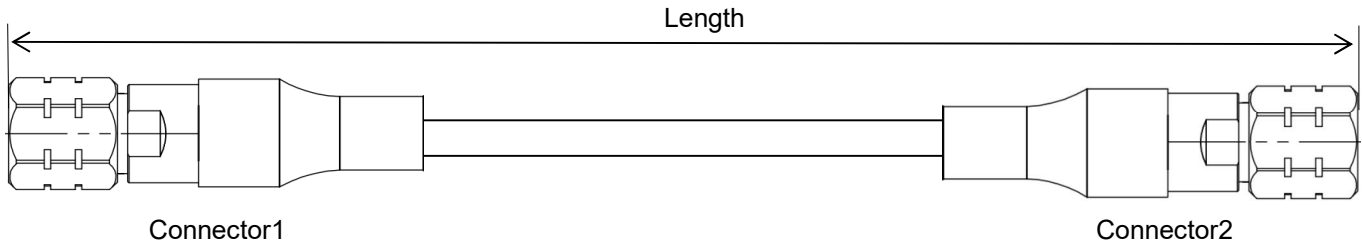


Precision Phase Stable Test Cable Assembly, Using PL230P

DC-67 GHz, 1.85mm Male to 1.85mm Male

PL230P-185M185M-L(L:Length)

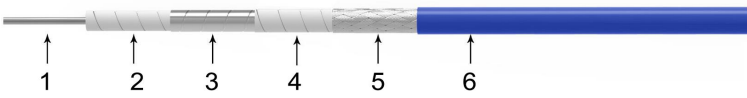


- Length can be in meter or in inch etc, e.g, PL230P-185M185M-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

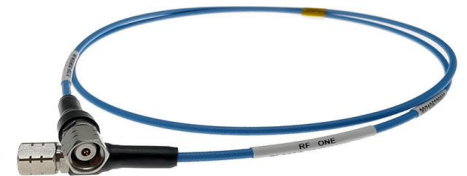
Configuration

Connector 1	1.85mm male	Connector 2	1.85mm male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated BeCu	Center Contact	Gold plated BeCu
Cable Type	PL230P		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.51	Solid silver-plated copper
2	Dielectric	1.60	Low density PTFE
3	Outer Conductor	1.70	Silver-plated copper tape wrap
4	Interlayer	2.00	Low density PTFE
5	Outer Shield	2.25	Silver-plated copper wire braid
6	Jacket	2.60	FEP



Electrical

Frequency	DC-67 GHz
Impedance	50 Ω
VSWR Max	1.4
IL Max(1 meter assembly)	7.1dB
*Mechanical Phase Stability	$< \pm 7^\circ$
Amplitude Stability vs Shaking	$< \pm 0.15\text{dB}$

Mechanical & Environmental

Min.Bending Radius Static	13mm
Min. Bending Radius Repeated	26mm
Velocity of Propagation	74%
Temperature(Operation)	-50~105 $^\circ\text{C}$
Temperature(Storage)	-60~105 $^\circ\text{C}$

* Wrapped 360° around a 26mm radius mandrel.

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

Frequency MHz	1000	2000	4000	6000	8000	10000	12000	18000	26500	40000	50000	67000
dB/100 Meter	63.1	90.1	129.1	159.7	186.0	209.5	231.0	287.7	355.9	448.0	508.5	601.9
Avg.Power kW	0.271	0.190	0.132	0.107	0.092	0.082	0.074	0.059	0.048	0.038	0.034	0.029

Attenuation at any frequency=[1.95000×SQRT(FMHz)]+[0.001450×FMHz]

- Notes:**
- 1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.03dB 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 (PL230P-185M185M-1M)

