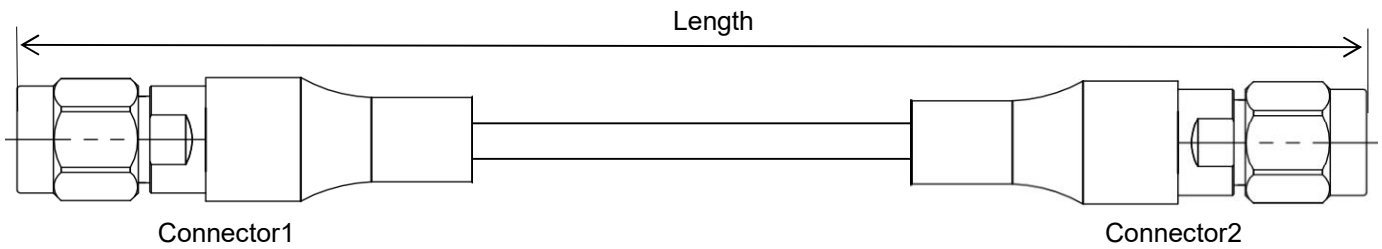


Ultra-Low Loss Phase Stable High Power Cable Assembly, Using PL400

DC-40 GHz, 2.92mm Male to 2.92mm Male

PL400-292M292M-L(L:Length)

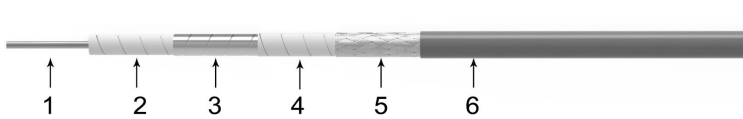


- Length can be in meter or in inch etc, e.g, PL380P-292M292M-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	2.92mm male	Connector 2	2.92mm male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated BeCu	Center Contact	Gold plated BeCu
Cable Type	PL400		

Cable and Armor Construction



No.	Construction	Size (mm)	Materials
1	Construction	1.06	Solid silver-plated copper
2	Center Conductor	2.82	Ultra-low density PTFE
3	Dielectric	3.00	Silver-plated copper tape wrap
4	Outer Conductor	3.45	Silver-plated copper wire braid
5	Outer Shield	4.00	FEP



Electrical

Frequency	DC-40 GHz
Impedance	50 Ω
VSWR Max	1.3
IL Max(1 meter assembly)	2.6dB
*Mechanical Phase Stability	$< \pm 5^\circ$
Amplitude Stability vs Shaking	$< \pm 0.1$ dB

Mechanical & Environmental

Min.Bending Radius Static	20mm
Min. Bending Radius Repeated	40mm
Velocity of Propagation	84%
Temperature(Operation)	-50 ~ 105 $^\circ\text{C}$
Temperature(Storage)	-60 ~ 105 $^\circ\text{C}$

* Wrapped 360° around a 40mm radius mandrel.

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

Frequency MHz	300	500	1000	3000	6000	8000	12000	14000	16000	18000	26500	40000
dB/100 Meter	16.5	21.4	30.4	53.0	75.4	87.5	107.8	116.8	125.1	133.0	162.9	202.4
Avg.Power kW	0.940	0.727	0.512	0.294	0.206	0.178	0.144	0.133	0.124	0.117	0.095	0.077

Attenuation at any frequency=[0.9499642×SQRT(FMHz)]+[0.0003109×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 (PL400-292M292M-1M)

