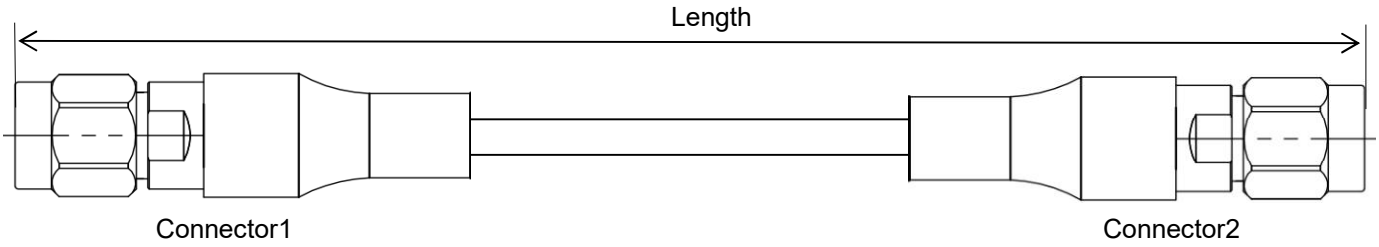
Armored Bench Test Cable Assembly, Using PL400

DC-40 GHz, 2.92mm Male to 2.92mm Male **PL400-292M292M-L-A(L:Length)**

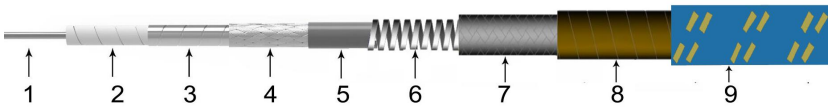


· Length can be in meter or in inch etc, e.g, PL380P-292M292M-1M. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.
· Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	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	**Armor**	AL700

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
6	Crush Resistance Layer	5.30	Stainless steel spiral
7	Strengthening Layer	5.90	Silver plated copper braid
8	Waterproof Layer	6.20	PTFE Binder
9	Armor Jacket	6.90	Braiding PTFE

Electrical

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

* Wrapped 360˚ around a 70mm radius mandrel.

Mechanical & Environmental

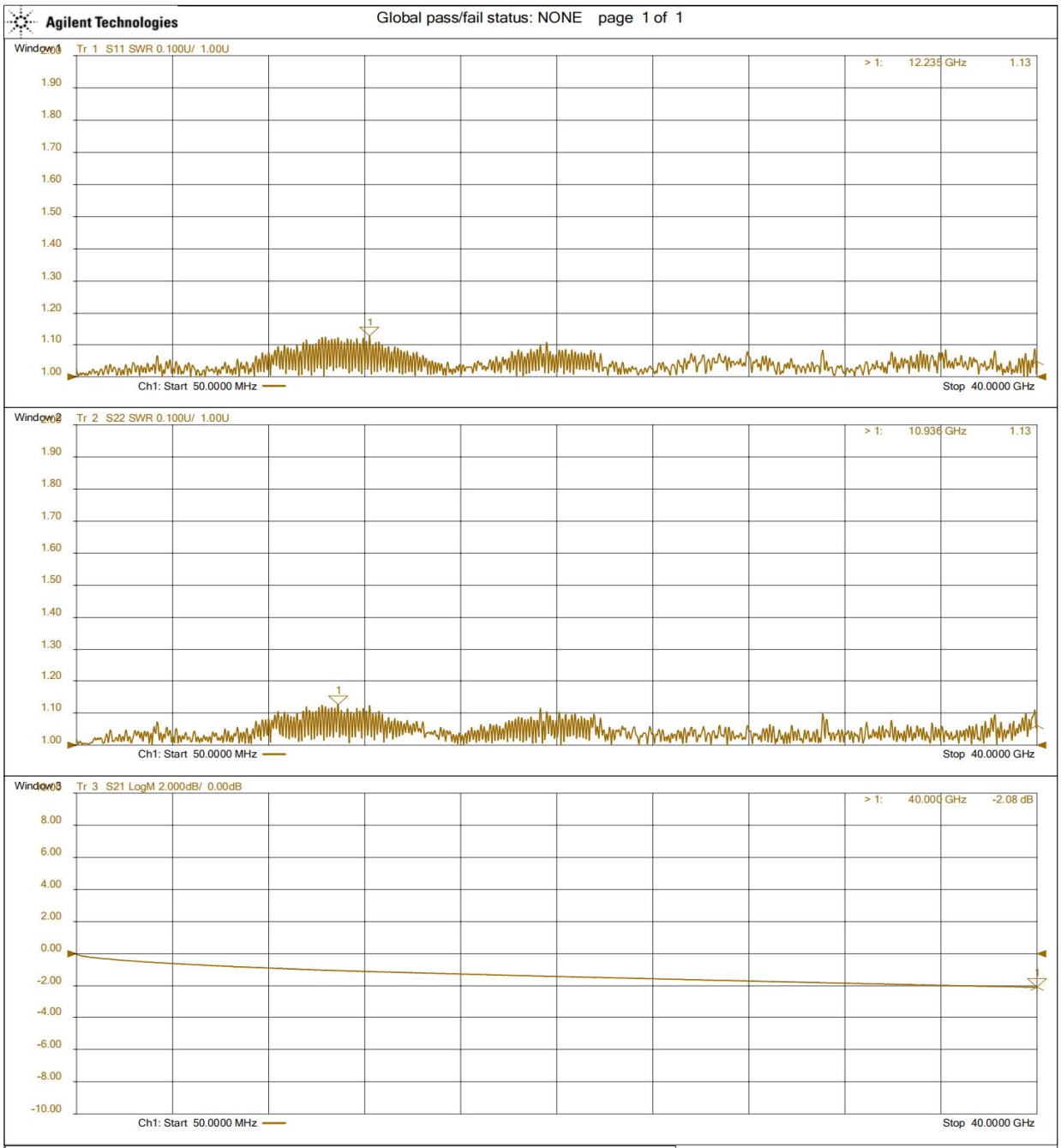
Min.Bending Radius Static	35mm
Min. Bending Radius Repeated	70mm
Velocity of Propagation	84%
Temperature(Operation)	-50～85 ºC
Temperature(Storage)	-60～85 ºC

Bulk Cable Attenuation(Typical@25℃) **& Power**(VSWR=1.0; 40℃; 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-A)



Channel Settings

Channel	Sweep Type	Points	Start (MHz)	Stop (GHz)	IF BW (kHz)	Sweep Time (s)	Pow 1 (dBm)	Pow 2 (dBm)
1	LinFreq	1601	50.000000	40.000000	10.000000	1.000000	-15.000000	-15.000000

Trace Attributes

Window	ID	Trace	Channel	Correction	Options	Marker	Position	Response
1	1	S11	1	C 2-Port		1	12234.75 MHz	1.1274
2	1	S22	1	C 2-Port		1	10911.406 MHz	1.1262
3	1	S21	1	C 2-Port		1	40000 MHz	-2.0979 dB