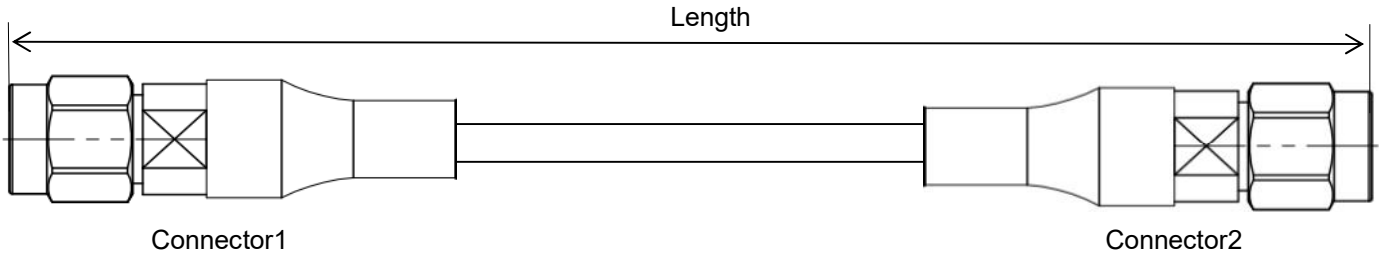


High Flex Life Economy Test Cable Assembly, Using FL460

DC-18 GHz, SMA Male to SMA Male

FL460-SMAMSMAM-L(L:Length)



- Length can be in meter or in inch etc, e.g, FL460-SMAMSMAM-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	SMA male	Connector 2	SMA male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	FL460		

Cable Construction

No.	Construction	Size (mm)	Materials
1	Center Conductor	1.02	Solid silver-plated copper
2	Dielectric	3.05	Low density PTFE
3	Outer Conductor	3.25	Silver-plated flat copper ribbon braid
4	Interlayer	3.49	Aluminum foil wrap
5	Outer Shield	4.00	Silver-plated copper wire braid
6	Jacket	4.60	FEP



Electrical

Frequency	DC-18 GHz
Impedance	50 Ω
VSWR Max	1.25
IL Max(1 meter assembly)	1.9dB
*Mechanical Phase Stability	$< \pm 6^\circ$
Amplitude Stability vs Shaking	$< \pm 0.2\text{dB}$

Mechanical & Environmental

Min.Bending Radius Static	20mm
Min. Bending Radius Repeated	46mm
Velocity of Propagation	76%
Temperature(Operation)	-50~85 $^\circ\text{C}$
Temperature(Storage)	-60~85 $^\circ\text{C}$

* Wrap the cable 360 degree around a mandrel whose diameter is ten times of the cable jacket size.

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

Frequency MHz	300	500	1500	2400	3000	6000	8000	10000	12400	16000	18000	26500
dB/100 Meter	17.8	23.0	40.1	51.0	57.2	81.7	94.9	106.6	119.3	136.4	145.2	178.4
Avg.Power kW	1.285	0.993	0.569	0.448	0.399	0.279	0.241	0.214	0.191	0.167	0.157	0.128

$$\text{Attenuation at any frequency} = [1.018000 \times \text{SQRT}(\text{FMHz})] + [0.00048 \times \text{FMHz}]$$

- 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 0.04dB 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 (FL460-SMAMSMAM-1M)

