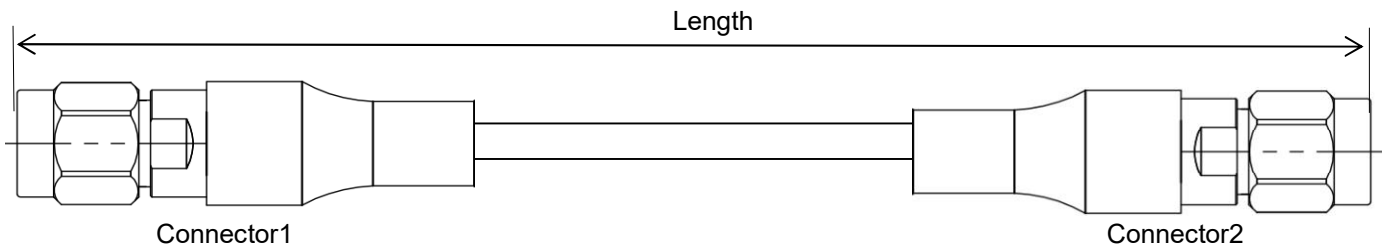


## Low Loss Flexible Cable Replacing Semi-flexible Cable Assembly, Using SP400

DC-18 GHz, SMA Male to SMA Male

SP400-SMAMSMAM-L(L:Length)

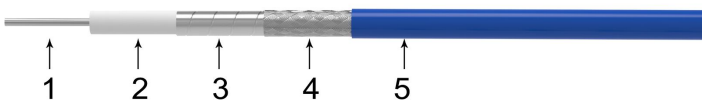


- Length can be in meter or in inch etc, e.g, SP400-SMAMSMAM-1M. Standard length tolerance:  $\pm 1.5\%$ . Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

### 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
<b>Cable Type</b>	SP400		

### Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.91	Silver plated copper
2	Dielectric	3.00	Solid PTFE
3	Outer Conductor	3.20	Silver plated copper tape wrap
4	Outer Shield	3.60	Silver plated copper wire braid
5	Jacket	4.00	FEP



### Electrical

Frequency	DC-26.5 GHz
Impedance	50 $\Omega$
VSWR Max	1.25
IL Max(1 meter assembly)	2.7dB
Velocity of Propagation	70%

### Mechanical & Environmental

Min.Bending Radius Static	20mm
Min. Bending Radius Repeated	40mm
Temperature(Operation)	-50~85 °C
Temperature(Storage)	-60~85 °C

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

Frequency MHz	300	1500	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	19.9	47.8	56.3	84.2	107.5	128.3	147.6	165.8	183.2	199.9	216.1	280.5
Avg.Power kW	0.512	0.213	0.181	0.121	0.095	0.080	0.069	0.062	0.056	0.051	0.047	0.036

$$\text{Attenuation at any frequency} = [1.082400 \times \text{SQRT}(\text{FMHz})] + [0.003937 \times \text{FMHz}]$$

- 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  $0.03\text{dB} \times \text{SQRT Freq}(\text{GHz})$ .
  - 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 (SP400-SMAMSMAM-1M)

