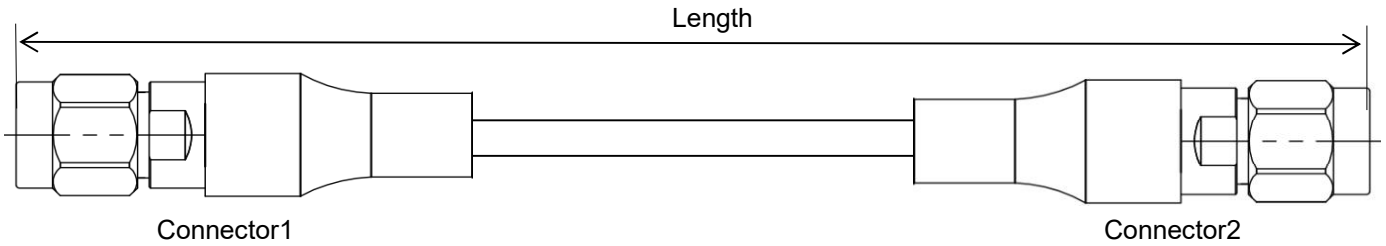


Economical Low Loss Flexible Cable Assembly, Using EL280

DC-26.5 GHz, SMA Male to SMA Male

EL280-SMMSMAM-L(L:Length)

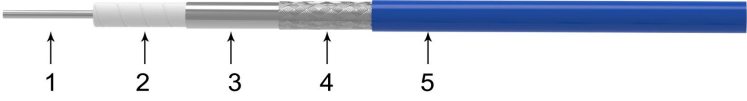


- Length can be in meter or in inch etc, e.g, EL280-SMAMSMAM-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

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	EL280		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.56	Solid silver plated copper
2	Dielectric	1.67	Low density PTFE
3	Outer Conductor	1.83	Aluminum foil wrap
4	Outer Shield	2.20	Silver-plated copper wire braid
5	Jacket	2.80	FEP



Electrical

Frequency	DC-26.5 GHz
Impedance	50 Ω
VSWR Max	1.25
IL Max(1 meter assembly)	4.4dB
*Mechanical Phase Stability	$< \pm 10^\circ$
Amplitude Stability vs Shaking	$< \pm 0.1\text{dB}$

Mechanical & Environmental

Min.Bending Radius Static	12mm
Min. Bending Radius Repeated	28mm
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	1000	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	32.5	60.7	87.4	126.9	158.6	186.1	211.0	234.1	255.7	276.3	295.9	372.1
Avg.Power kW	0.187	0.100	0.070	0.048	0.038	0.033	0.029	0.026	0.024	0.022	0.021	0.016
	K1=1.830000						K2=0.002800					
Attenuation at any frequency=[K1×SQRT(FMHz)]+[K2×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 (EL280-SMAMSMAM-1M)

