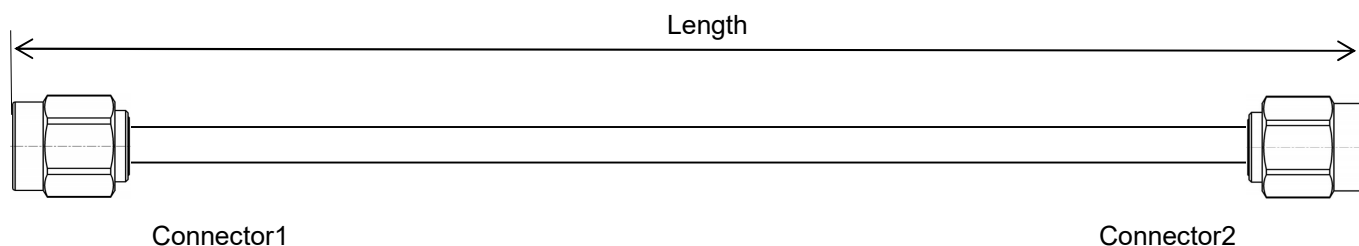


Tight Bend Triple-shielding Flexible Cable Assembly, Using MB250

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

MB250-292M292M-L(L:Length)

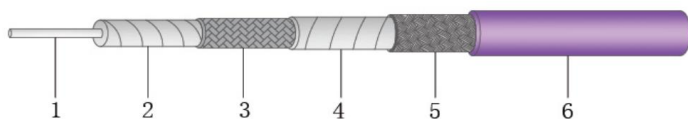


- Length can be in meter or in inch etc, e.g, MB250-292M292M-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

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	MB250		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center conductor	0.51	Silver plated copper
2	Dielectric	1.65	Low density PTFE
3	Outer conductor	1.82	Silver plated copper wire braiding
4	Middle layer	1.90	Aluminum foil
5	Outer shield	2.12	Stainless steel wire
6	Jacket	2.50	FEP

Electrical

Frequency	DC-40 GHz
Impedance	50 Ω
VSWR Max	1.4
IL Max(1 meter assembly)	6.6dB
Velocity of Propagation	70%
*Mechanical Phase Stability	$< \pm 15^\circ$ @ 50GHz
Amplitude Stability vs Shaking	$< \pm 0.15$ dB

* Wrapped 360° around a 25 mm radius mandrel.

Mechanical & Environmental

Min.Bending Radius Static	10mm
Min. Bending Radius Repeated	25mm
Temperature(Operation)	-50~85 °C
Temperature(Storage)	-60~85 °C

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

Frequency MHz	300	1000	2000	4000	6000	10000	12000	14000	18000	26500	40000	50000
dB/100 Meter	45.1	82.9	118.0	168.4	207.7	271.1	298.3	323.6	369.7	454.6	568.2	642.1
Avg.Power kW	0.500	0.272	0.191	0.134	0.109	0.083	0.076	0.070	0.061	0.050	0.040	0.035
Attenuation at any frequency= $[2.580809 \times \text{SQRT}(\text{FMHz})] + [0.0013 \times \text{FMHz}]$												

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 (MB250-292M292M-30IN)

