EB10 – Super Low Loss Flexible Cable 18 GHz

Model: EB10-xx-yy-zzM **Connectors:** N or SMA (m or f or 90°m)

Typical performance at +25°C; sea level and VSWR 1.3:1 max.

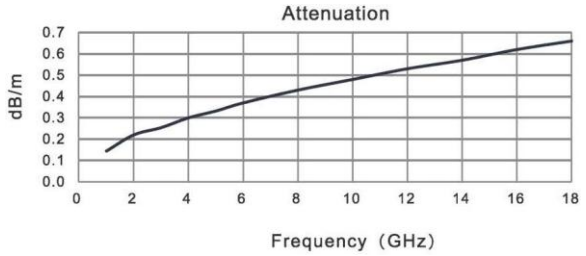
Frequency [GHz]	1	2	3	4	5	6	8	10	12	14	16	18
Cable Attenuation [dB/m]	0.14	0.22	0.25	0.30	0.33	0.37	0.43	0.48	0.53	0.57	0.62	0.66
N CW Power [W]	1000	700	600	500	475	425	360	320	300	280	260	250
SMA CW Power [W]	300	210	170	150	140	120	110	100	90	80	70	75

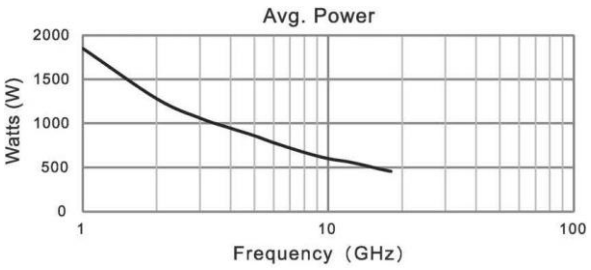
Total Cable Assembly Attenuation at 18 GHz (including connectors)

Cabel Length [m]	1	1.5	2	2.5	3	4	5	7.5	10
Total Attenuation [dB]	1.1	1.4	1.7	2.1	2.4	3.1	3.4	5.4	7.1

Cable Construction

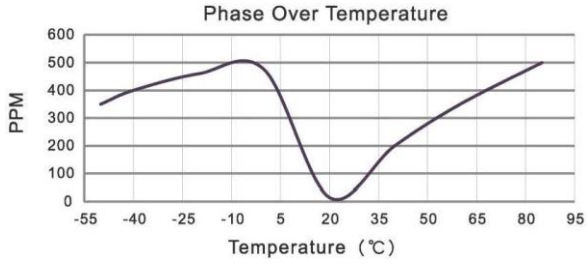
	Description	Diameter	Material
1	Center Conductor	2.30 mm	Solid SPC
2	Dielectric	6.25 mm	LD PTFE
3	Outer Conductor	6.50 mm	SPC Strip
4	Outer Shield	6.91 mm	SPC Braid
5	Jacket	7.37 mm	FEP, light blue
		SPC: silver plated copper	*Low Density PTFE, FEP: teflon*





Mechanical & Environmental

Bend Radius: installation	40 mm
Bend Radius: repeated	80 mm
Weight	125 g/m
Operating Temperature	-55 … +200 °C



Electrical

Impedance	50 Ω	Shielding Effectiveness	>90 dB
Velocity of Propagation	84,5%	Cut-Off Frequency	18 GHz
Delay Time	4.1 ns/m	Flex. Phase Stability*	±2° at 18 GHz
Capacitance	78.7 pF/m	Temp. Phase Stability	500 ppm at -55 … +85 °C
Isolation Voltage	3600 V	Amplitude Stability*	<±0.05 dB/m at 18 GHz

** Phase and amplitude stability test method:*
wrap the cable 360° around a mandrel with radius of 10 times the cable diameter