

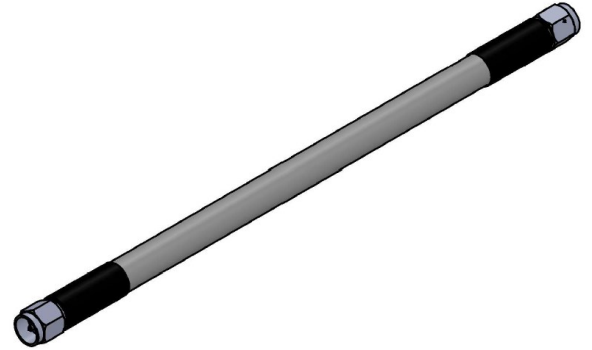


## ECHELON MAX EM-B780 Series

### Ultra Low Loss Phase Stable Cable Assemblies, SMA 18GHz

#### Features

- VSWR 1.35:1 Max up to 18GHz
- SMA Connectors both ends
- 83% Phase Velocity
- Double Shielded
- Shielding Effectivity 90dB
- 7.8 mm FEP Outer Jacket, Gray
- EM-B780 Series Ultra Low Loss
- Phase and Amplitude Stable



#### ELECTRICAL SPECIFICATION (25° C, sea level)

Description	Min	Typ	Max	Units/Note
Impedance		50Ω		Ohm
Frequency	DC		18	GHz
VSWR, 18GHz			1.35:1	@18GHz
Velocity of Propagation		83		%
Dielectric Withstand		2500		Volts
RF Shielding	90			dB
Capacitance		80		pF/m
Temperature	-55		165	° C
Phase change vs bending		±0.3		° /GHz
Phase change vs temperature		750		PPM, (-45 - 85 ° C)

#### Performance by Frequency (Cable Only)

Frequency (MHz)	Insertion Loss(25° C) dB/ft	Average Power(25° C @ Sea Level) Watts
500	0.032	2580
1000	0.045	1814
2000	0.079	1270
3000	0.079	1033
4000	0.092	900
6000	0.103	721
8000	0.132	620
10000	0.149	551
15000	0.185	444
18000	0.204	403

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## *ECHELON MAX EM-B780 Series*

### Ultra Low Loss Phase Stable Cable Assemblies, SMA 18GHz

MECHANICAL SPECIFICATION, CONNECTORS		
Description	Connector 1	Connector 2
Type	SMA Male Straight/Right Angle	SMA Female
Interface Spec	MIL-STD-348	MIL-STD-348
Mating Cycles	500	500
Hex Wrench Size	5/16 in	N/A
Mating Torque	8-10in-lbs/0.9-1.13nm	8-10in-lbs/0.9-1.13nm
Material	Stainless Steel	Stainless Steel
Pin/Receptacle	Gold Plated BeCu	Gold Plated BeCu
Dielectric Type	PTFE	PTFE

MECHANICAL SPECIFICATION, CABLE	
Description	Specification
Cable Type	EM-B780
Diameter	0.307in. (7.8mm)
Weight	0.089lb/ft(0.133kg/m)
Minimum Bend Radius, Static	1.22in. (31mm)
Minimum Bend Radius, Dynamic	2.46in. (62.5mm)
Length Tolerance	±0.196in(±5mm)

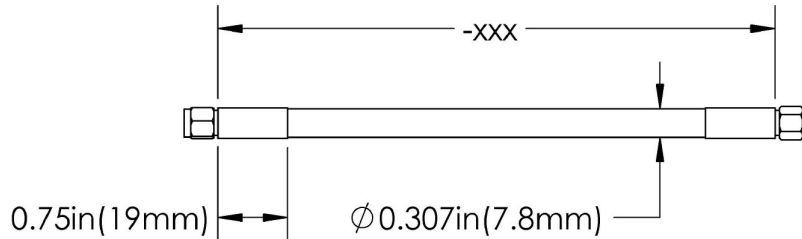
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## ECHELON MAX EM-B780 Series

### Ultra Low Loss Phase Stable Cable Assemblies, SMA 18GHz

#### Ordering Information



Connector Options:  
SMA

Part Number Configurator			
Series, SMA	Connector 1	Connector 2	Length (in)
EM-B780SMA	XX	XX	-XXX

Connector 1		Connector 2	
SMA Male, Straight	MS	SMA Male, Straight	MS
SMA Male, Right Angle	MR	SMA Male, Right Angle	MR
SMA Female Bulkhead	FB	SMA Female Bulkhead	FB

\*\*\* - If Connector 1 = Connector, 2 omit Connector 2

#### Example:

EM-B780SMAMSMR-012, 12 inch cable with straight SMA male to right angle SMA male.

EM-B780SMAMS-024, 24 inch cable with straight SMA male both ends.

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