

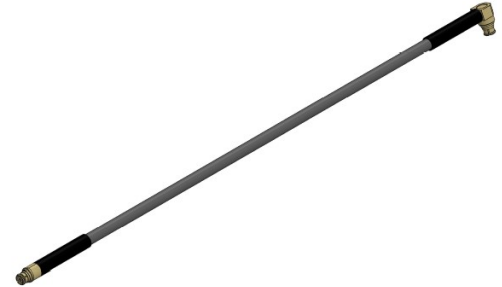


ECHELON MAX EM-B310 Series

Ultra Low Loss Phase Stable Cable Assemblies, SMPM 18GHz

Features

- VSWR 1.35:1 Max up to 18GHz
- SMPM Connectors both ends
- 83% Phase Velocity
- Double Shielded
- Shielding Effectivity 90dB
- 3.1 mm FEP Outer Jacket, Gray
- EM-B310 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		82		%
Dielectric Withstand		1000		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		
Frequency (MHz)	Insertion Loss(25° C) dB/ft	Average Power(25° C @ Sea Level) Watts
1000	0.143	407
2000	0.203	286
3000	0.250	233
4000	0.289	201
6000	0.357	163
8000	0.414	140
10000	0.465	125
15000	0.576	105
18000	0.634	92

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MECHANICAL SPECIFICATION, CONNECTORS		
Description	Connector 1	Connector 2
Type	SMPM	SMPM
Mating Cycles, Full Detent	>100	>100
Mating Cycles, Limited Detent	>100	>100
Mating Cycles, Smooth Bore	>1000	>1000
Engagement Force, Full Detent	4.5lbs (20N)	4.5lbs (20N)
Engagement Force, Smooth Bore	2.5lbs (11.1N)	2.5lbs (11.1N)
Disengagement Force, Full Detent	6.5lbs (11.1N)	6.5lbs (11.1N)
Disengagement Force, Smooth Bore	1.5lbs (11.1N)	1.5lbs (11.1N)
Material, Body	Gold Plated Brass	Gold Plated Brass
Contacts	Gold Plated BeCu	Gold Plated BeCu
Dielectric Type	PTFE	PTFE

MECHANICAL SPECIFICATION, CABLE	
Description	Specification
Cable Type	EM-B310
Diameter	0.122in. (3.1mm)
Weight	0.181lb/ft(0.027kg/m)
Minimum Bend Radius, Static	0.590in. (15mm)
Minimum Bend Radius, Dynamic	1.18in. (31.0mm)
Length Tolerance	±0.196in(±5mm)

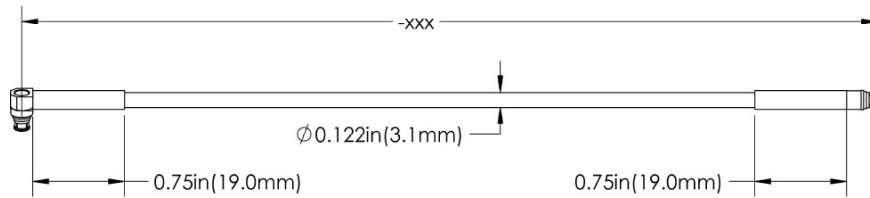
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Ordering Information



Connector Options:
SMPM

Part Number Configurator

Series, SMPM	Connector 1	Connector 2	Length (in)
EM-B310SMPM	XXX	XXX	-XXX

Connector 1	
SMPM Plug(F), Straight	SPF
SMPM Jack(M), Straight	SJM
SMPM Plug(F), Right Angle	RPF
SMPM Jack(M), Right Angle	Call

Connector 2	
SMPM Plug(F), Straight	SPF
SMPM Jack(M), Straight	SJM
SMPM Plug(F), Right Angle	RPF
SMPM Jack(M), Right Angle	Call

Example:

EM-B310SMPMSPFRPF-012, 12 inch cable with straight SMPM Plug to right angle SMPM plug.

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