

Coaxial Cable

MC-12SMR+

50Ω 12 inch DC to 18 GHz

Description

- Wideband frequency coverage, DC to 18 GHz
- Low Loss, 1.1 dB at 18 GHz
- Excellent Return Loss, 18 dB at 18 GHz
- 6 mm bend radius for tight installations
- Anti-torque nut prevents cable stress during installation.



Model No.	MC-12SMR+
Connectors	Right Angle SMA -Male to Right Angle SMA -Male

APPLICATIONS

- Communication receivers and transmitters
- Military and aerospace system
- Environmental and test chambers
- RF systems

PRODUCT OVERVIEW

Microcircuits Series Coaxial Cables are ideal for interconnection of coaxial components or sub-systems. The construction includes a silver-plated copper-clad steel center conductor which maintains the shape after bending. The outer shield is copper braid, tin soaked, which minimizes signal leakage and at the same time flexible for easy bend. Dielectric is low loss PTFE. Connectors have passivated stainless-steel coupling nut over a gold plated connector body and gold plated, brass center conductor.

KEY FEATURES

Features	Advantages
Excellent Return Loss	Typical return loss of 34 dB to 6 GHz and 22 dB to 18 GHz makes the MC- 12SMR+ series ideal for interconnecting a wide variety of RF components while minimizing VSWR ripple contribution due to mating cables & connectors.
High Power Handling Capability: <ul style="list-style-type: none"> - 532 W at 0.5 GHz - 90 W at 18 GHz 	Micro-Circuits MC- 12SMR+ series cables can support medium to high RF power levels and can be used in the transmit path. (NOTE: power rating at sea-level).
Built-in Anti-torque Nut	Supports the connector bodies during installation, preventing stress to the connector/cable interface.

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ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Length		12			inches
Insertion Loss	DC - 2	—	0.35	0.56	dB
	2 - 6	—	0.65	0.99	
	6 - 10	—	0.87	1.33	
	10 - 18	—	1.30	1.83	
Return Loss	DC - 2	23	32	—	dB
	2 - 6	23	23	—	
	6 - 10	17	23	—	
	10 - 18	16	18	—	

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to +105°C
Storage Temperature	-55°C to +105°C
Power Handling at 25°C,Sea Level	532W at 0.5 GHz 365W at 1 GHz 256W at 2 GHz 145W at 6 GHz 115W at 10 GHz 90W at 18 GHz

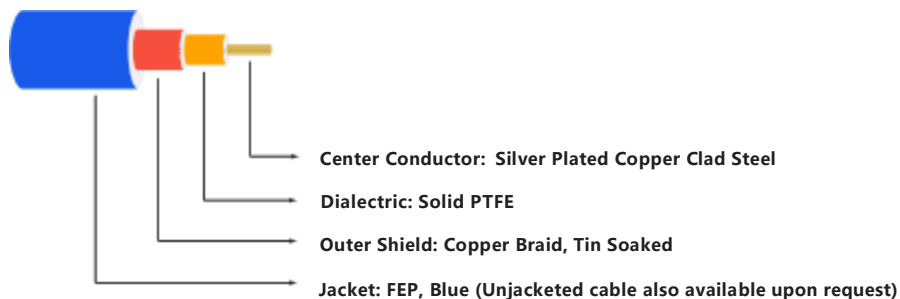
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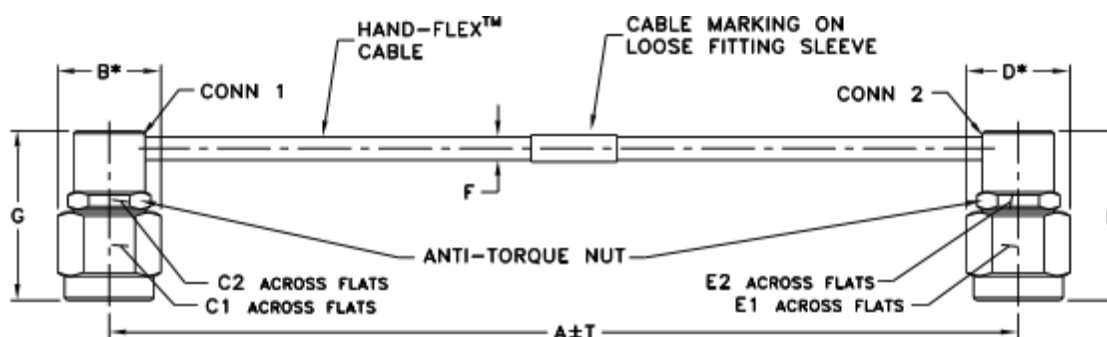
MC-12SMR+

50Ω 3 inch DC to 18 GHz

CABLE CONSTRUCTION



OUTLINE DRAWING



OUTLINE DIMENSIONS (in^{ch} mm)

A	B	C1	C2	D	E1	E2	F	G	H	T
12.0	.36	.313	.250	.36	.313	.250	.108	0.634	0.634	0.1
304.80	9.14	7.95	6.35	9.14	7.95	6.35	2.75	16.10	16.10	2.54

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