Coaxial Cable

MC-12SMNM+

50Ω 12 inch DC to 18 GHz

Description

- Wideband frequency coverage, DC to 18 GHz
- Low Loss, 0.8 dB at 18 GHz
- Excellent Return Loss, 22 dB at 18 GHz
- 8 mm bend radius for tight installations
- Anti-torque nut prevents cable stress during installation.

Model No.	MC-12SMNM+
Connectors	SMA-Male to N-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 integrating coaxial components and sub-systems in tight spaces and dense system configurations . SMA to N-Type connection avoids need for an adapter between components with SMA -F and N-F connection ports , reducing system cost and improving reliability . Microcircuits coaxial cables have the advantages of wide frequency range and excellent return loss and insertion loss. Available in a variety of lengths.

KEY FEATURES

Features	Advantages
Excellent Return Loss	Typical return loss of 25 dB to 6 GHz and 18 dB to 18 GHz makes the MC- SMNM+ series ideal for interconnecting a wide variety of RF components while minimizing VSWR ripple contribution due to mating cables & connectors.
High Power Handling Capability: • 546 W at 0.5 GHz • 90 W at 18 GHz	Micro-Circuits MC- SMNM+ 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.
SMA-Male / N-Male connectors	Eliminates need for adapter when connecting to SMA-F and N-F connectors, reducing cost and improving reliability.

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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 2 - 6 6 - 10 10 - 18		0.19 0.36 0.50 0.77	0.37 0.78 0.91 1.28	dB
Return Loss	DC - 2 2 - 6 6 - 10 10 - 18	23 23 17 17	33 27 22 18	-	dB

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	546W at 0.5 GHz 387W at 1 GHz 273W at 2 GHz 156W at 6 GHz 121W at 10 GHz 90W at 18 GHz

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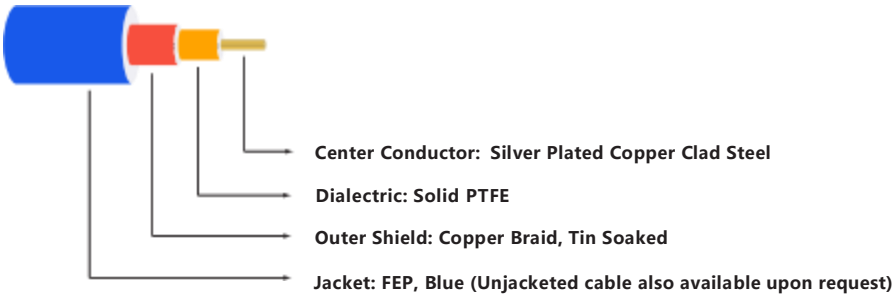
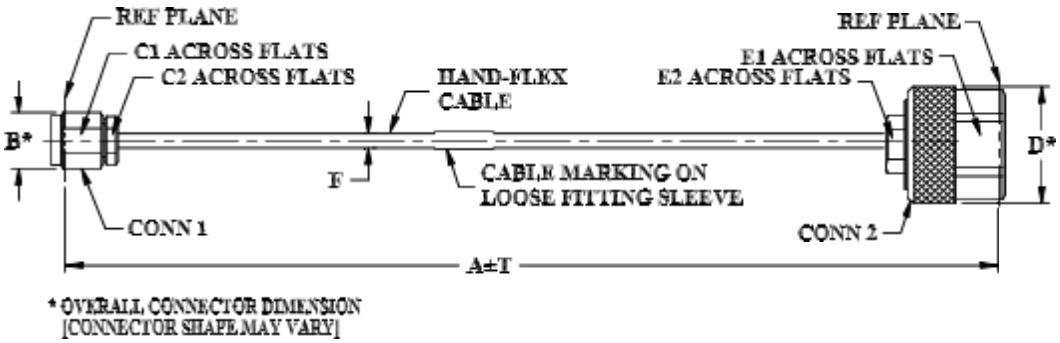
CABLE CONSTRUCTION



OUTLINE DRAWING



OUTLINE DIMENSIONS (inch/mm)

A	B	C1	C2	D	E1	E2	F	T
12.0	.36	.313	.250	.88	.750	.375	.163±.004	.10
304.80	9.14	7.95	6.35	22.35	19.05	9.53	4.14±0.10	2.54

Micro-Circuits

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