



Coaxial Cable

MC-3SMR+

50Ω 3 inch DC to 18 GHz



Model No.	MC-3SMR+
Connectors	Right Angle SMA -Male to Right AngleSMA -Male

Description

- Wideband frequency coverage, DC to 18 GHz
- Low Loss, 0.45 dB at 18 GHz
- Excellent Return Loss, 22dB at 18 GHz
- 6 mm bend radius for tight installations
- Anti-torque nut prevents cable stress during installation.

APPLICATIONS

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

PRODUCT OVERVIEW

Micro-Circuits MC- 3SMR+ 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- 3SMR+ 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">- 520 W at 0.5 GHz- 80 W at 18 GHz	Micro-Circuits MC- 3SMR+ 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		3			inches
Insertion Loss	DC - 2	—	0.14	0.32	dB
	2 - 6	—	0.2	0.56	
	6 - 10	—	0.24	0.73	
	10 - 18	—	0.3	1.00	
Return Loss	DC - 2	23	37	—	dB
	2 - 6	23	35	—	
	6 - 10	17	25	—	
	10 - 18	16	24	—	

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	520W at 0.5 GHz 370W at 1 GHz 255W at 2 GHz 140W at 6 GHz 115W at 10 GHz 80W at 18 GHz

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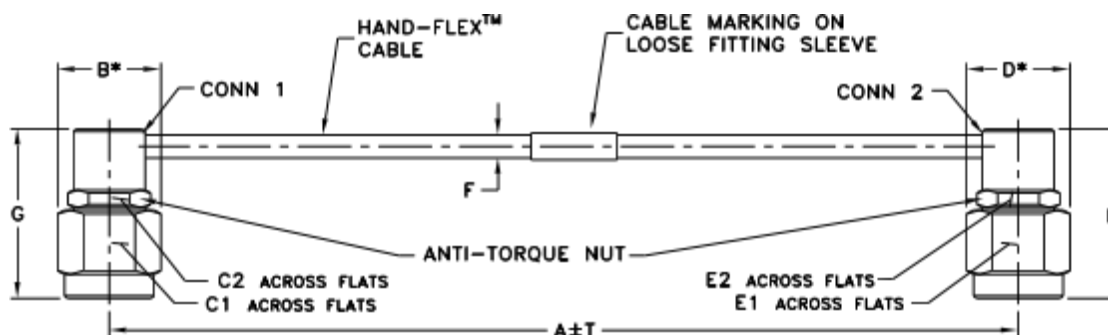
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CABLE CONSTRUCTION



- Center Conductor: Silver Plated Copper Clad Steel
- Dielectric: Solid PTFE
- Outer Shield: Copper Braid, Tin Soaked
- Jacket: FEP, Blue (Unjacketed cable also available upon request)

OUTLINE DRAWING



OUTLINE DIMENSIONS (in ^{ch}/_{mm})

A	B	C1	C2	D	E1	E2	F	G, H	T
3.0	.36	.313	.250	.36	.313	.250	.163±.004	.728±.02	.05
76.20	9.14	7.95	6.35	9.14	7.95	6.35	4.14±0.10	18.5±0.5	1.27

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