

Phase Stable Test Cable SMA Male to N Male using FM-151TC Coax to 18 GHz, RoHS

Fairview's Phase Stable Test Cables allow customers to make accurate repeatable measurements due to the cables phase and amplitude stability when flexed. The FM-151TC cable has a max phase deviation of +/- 5 degrees at 18 GHz reducing any measurement error introduced by the test cables during product evaluation. The FM-151TC test cables use a solid PTFE dielectric core to help prevent any change in diameter under flexure resulting in good insertion loss and low VSWR. These cables are designed to exceed 5,000 mating cycles when handled with proper care. The FM-151TC cables have greater flexibility and allow for a tighter connector spacing due to their 0.151 inch diameter. This series of cables are an excellent choice for the laboratory or production environment when a more precise measurement is needed, especially when there is movement involved in the testing cycle

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.3:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		28.8 [94.49]		pF/ft [pF/m]
Phase Stability with Flexure		±5		Degrees

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	6	12	18			GHz
Insertion Loss (Max.)	0.44 [1.44]	0.66 [2.17]	0.85 [2.79]			dB/ft [dB/m]
VSWR (Max.)	1.3:1	1.3:1	1.3:1			
Power Handling (Max.)	55	29	20			Watts

Mechanical Specifications

Cable Assembly

Cable

Cable Type	FM-151TC
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Tape
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	Polyurethane
Jacket Diameter	0.151 in [3.84 mm]

One Time Minimum Bend Radius 0.75 in [19.05 mm]



Configuration:

- SMA Male
- N Male
- FM-151TC

Features:

- Phase and amplitude stable when flexed
- Lighter weight, more flexible +/- 5° to 18 GHz
- Flexible and durable cable with a minimum bend radius of 0.75 inches
- Low VSWR and insertion loss
- Strong connector coax interface with heavy duty booting
- Test data provided with every cable assembly
- Cable provides extended life up to 5,000 mating cycles with proper care
- All in-stock and available to ship same day

Applications:

- RF test stations
- Bench-top lab testing
- Antenna testing
- Automated testing using multiple ports

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Coupling Nut Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range -65 to +90 deg C

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes

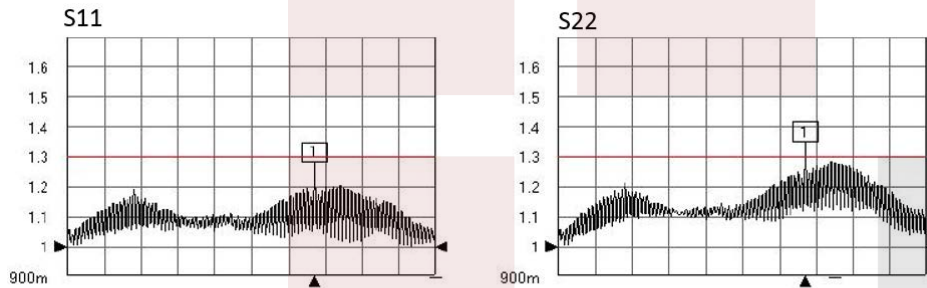
Plotted and Other Data

Notes:

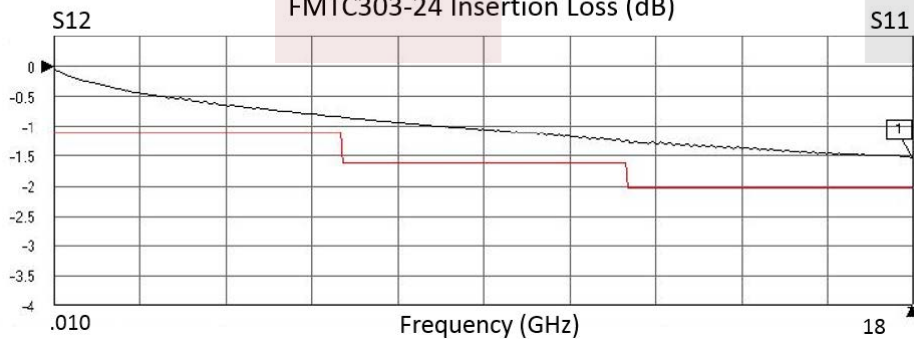
- Values at 25°C, sea level.

Typical Performance Data

FMTC303-24 VSWR



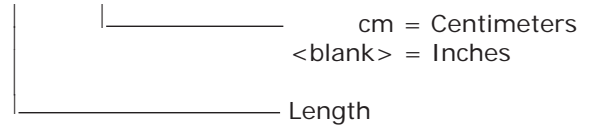
FMTC303-24 Insertion Loss (dB)



How to Order

Part Number Configuration:

FMTC303 - xx uu



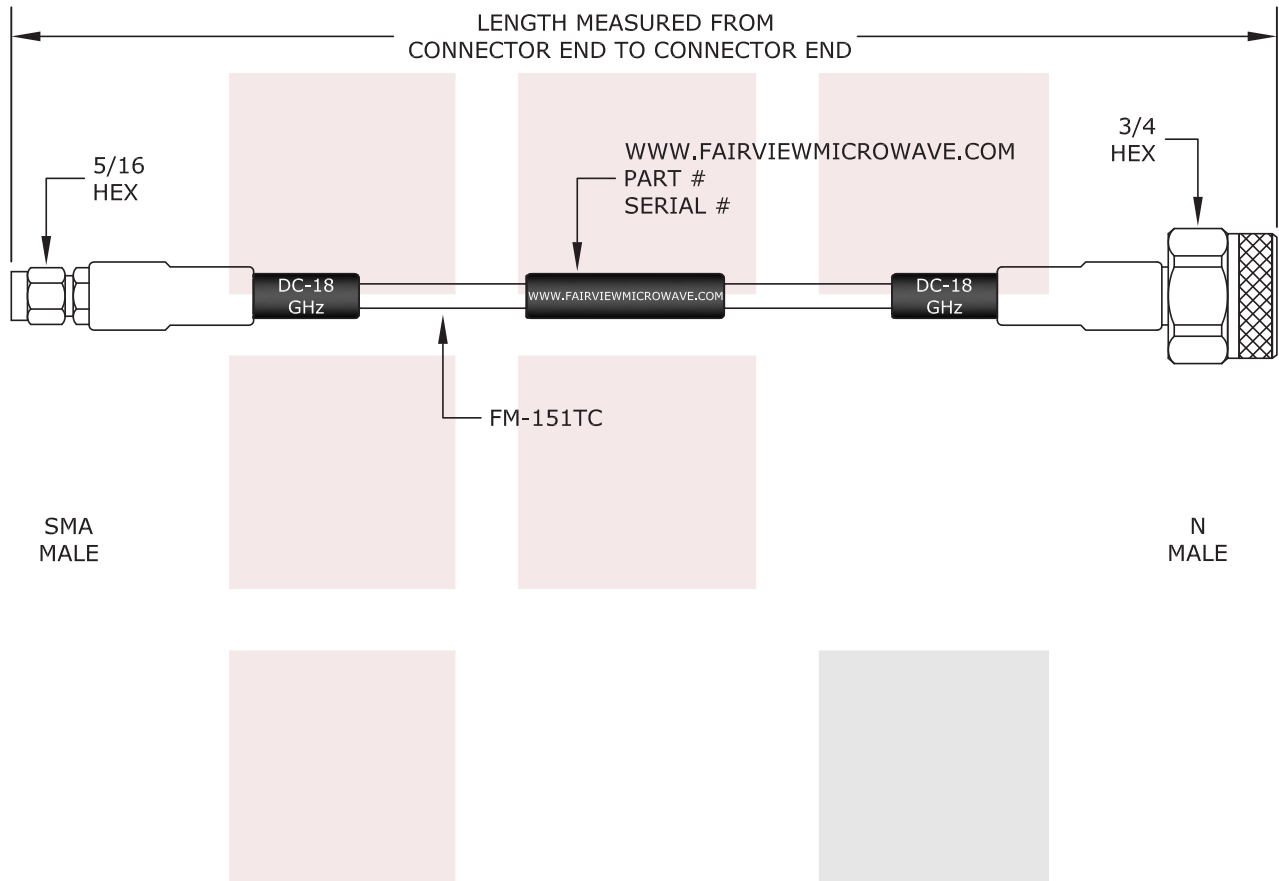
Example: FMTC303-12 = 12 inches long cable
 FMTC303-100cm = 100 cm long cable

Phase Stable Test Cable SMA Male to N Male using FM-151TC Coax to 18 GHz, RoHS from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Phase Stable Test Cable SMA Male to N Male using FM-151TC Coax to 18 GHz,RoHS FMTC303](#)

URL: <http://www.fairviewmicrowave.com/sma-male-n-male-cable-.90-coax-fmtc303-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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TITLE Phase Stable Test Cable SMA Male to N Male using FM-151TC Coax to 18 GHz, RoHS		DWG NO FMTC303		CAGE CODE 3FKR5	
CAD FILE 072015 SHEET		SCALE N/A SIZE A		2233	