

## Precision SMA Male to SMA Male Phase Stable Cable .90 Coax in 48 Inch with LF Solder

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 27 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		27	GHz
VSWR			1.35:1	
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	27			GHz
Insertion Loss (Max.)	2.97	3.77	4.82			dB
VSWR (Max.)	1.3:1	1.3:1	1.35:1			
Power Handling (Max.)	29	20	14			W

### Mechanical Specifications

#### Cable Assembly

Length\* 48 in [121.92 cm]  
 Weight 0.1965 lbs [89.13 g]

#### 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]



### Configuration:

- SMA Male
- SMA Male
- FM-151TC

### Features:

- Max Frequency 27 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Triple Shielded
- Polyurethane Jacket
- Phase and amplitude stable when flexed
- Lighter weight, more flexible +/- 5° to 27 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:

- General Purpose
- Laboratory Use
- RF test stations
- Bench-top lab testing
- Antenna testing
- Automated testing using multiple ports

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

One Time Minimum Bend Radius      0.75 in [19.05 mm]

**Connectors**

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

**Environmental Specifications**
**Temperature**

Operating Range      -65 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**How to Order**

Part Number Configuration:

**FMTC401 - xx uu**

 cm = Centimeters  
 <blank> = Inches

Length

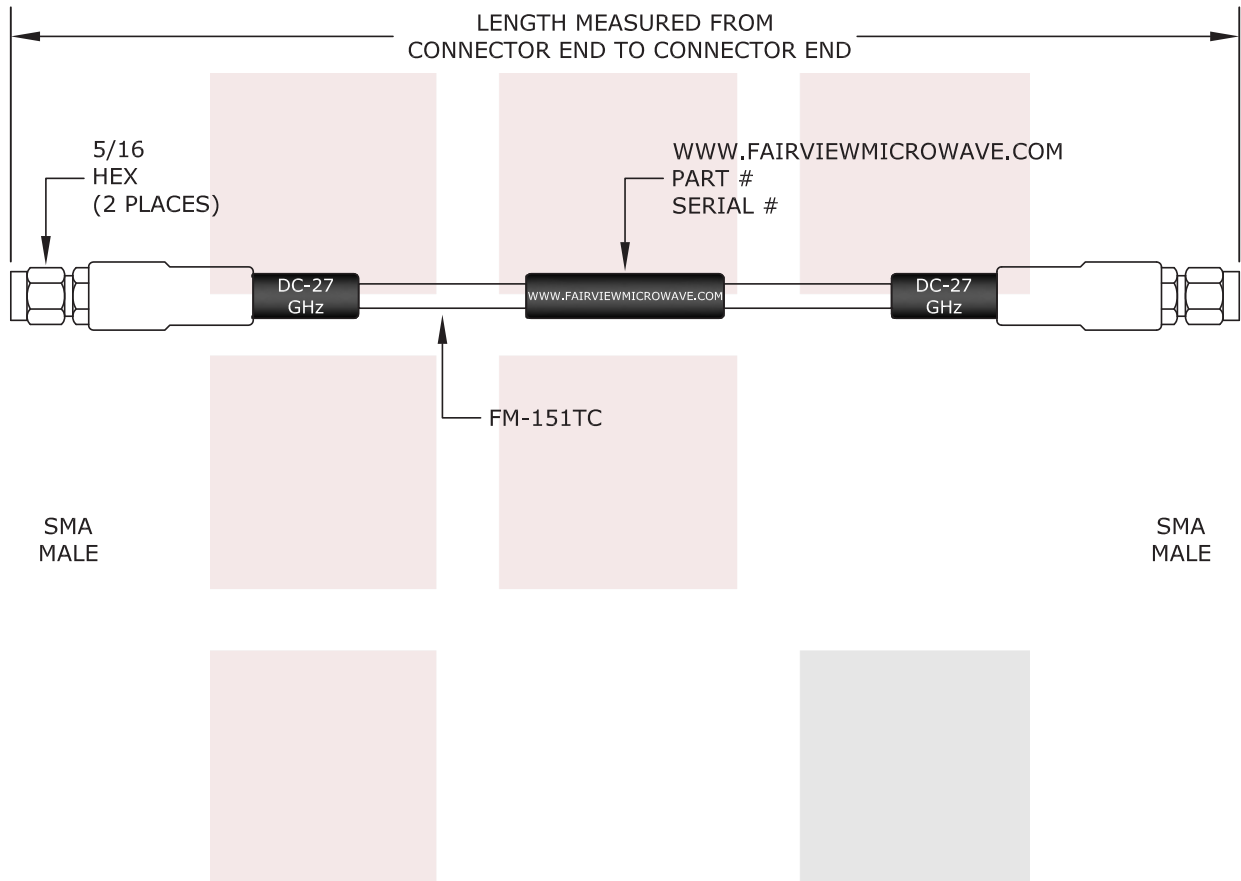
 Example: FMTC401-12 = 12 inches long cable  
 FMTC401-100cm = 100 cm long cable

Precision SMA Male to SMA Male Phase Stable Cable .90 Coax in 48 Inch with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

 Click the following link to obtain additional part information: [Precision SMA Male to SMA Male Phase Stable Cable .90 Coax in 48 Inch with LF Solder FMTC401-48](#)

 URL: <https://www.fairviewmicrowave.com/precision-sma-male-sma-male-cable-.90-coax-fmtc401-48-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.



<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE Precision SMA Male to SMA Male Phase Stable Cable .90 Coax in 48 Inch with LF Solder		DWG NO FMTC401		CAGE CODE 3FKR5	
CAD FILE	072015	SHEET		SCALE	N/A
		SIZE	A		2233