



# Precision SMA Male to SMA Male Phase Stable Cable .90 Coax 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	Ty	/p	Max	ι	Jnits
Frequency Range	DC			27		GHz
VSWR				1.35:1		
Velocity of Propagation		7	0			%
RF Shielding	90					dB
Capacitance		28.8 [	28.8 [94.49] pF/ft [ <sub>1</sub>		t [pF/m]	
Phase Stability with Flex	ure	±5		Degrees		

## **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	6	12	27			GHz
Insertion Loss (Max.)	0.44	0.66	0.85			dB/ft
	1.44	2.17	2.79			dB/m
VSWR (Max.)	1.3:1	1.3:1	1.35:1			
Power Handling (Max.)	) 55	29	20			W

### **Mechanical Specifications**

#### **Cable Assembly**

Length\*

0 in [0 mm]

#### **Cable**

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields

Shield Layer 1 Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter FM-151TC 50 Ohms Solid

Copper, Silver

PTFE 3

Silver Plated Copper Braid Silver Plated Copper Tape Silver Plated Copper Braid

Polyurethane 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

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cm = Centimeters

<br/>
<br/>
dlank> = Inches

Length

One Time Minimum Bend Radius 0.75 in [19.05 mm]

#### **Connectors**

Description	Connector 1	Connector 2			
Туре	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** 

-65 to +90 deg C Operating Range

**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:

Example: FMTC401-12 = 12 inches long cable

FMTC401-100cm = 100 cm long cable

Precision SMA Male to SMA Male Phase Stable Cable .90 Coax 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.

FMTC401 - xx

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Click the following link to obtain additional part information: Precision SMA Male to SMA Male Phase Stable Cable .90 Coax with LF Solder FMTC401

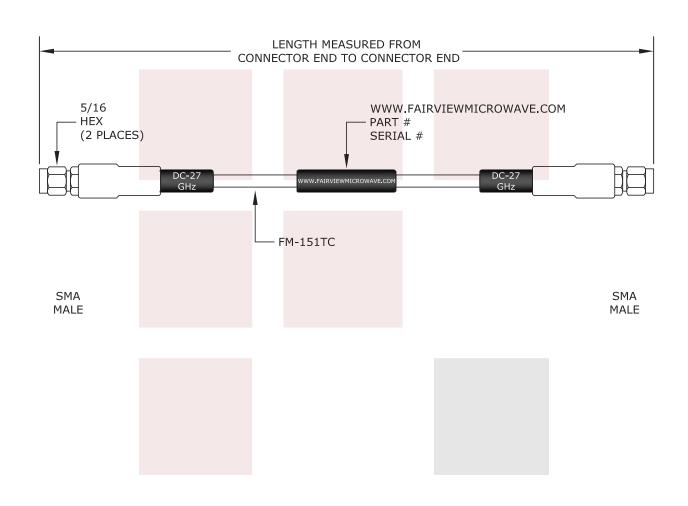
URL: https://www.fairviewmicrowave.com/sma-male-sma-male-cable-.90-coax-fmtc401-p.aspx

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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FAIRVIEW MICROWAVE INC.  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].					
Precision SMA Male to SMA Male Phase Stable Cable	DWG NO FMTC401			CAGE CODE 3FKR5		
.90 Coax with LF Solder	CAD FILE 072015	SHEET	SCAL	E N/A	SIZE A	2233