



# Precision SMA Male to SMA Female Phase Stable Cable .80 Coax with LF Solder

The SMA male to SMA female cable using .80 coax, part number FMTC202, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible FM-195TC coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMTC202 SMA male to SMA female cable assembly operates to 27 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 100 dB. 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-195TC cable has a max phase deviation of +/- 2 degrees to 18 GHz and +/- 3 degrees at 27 GHz reducing any measurement error introduced by the test cables during product evaluation. The FM-195TC 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 larger 0.195 inch diameter has lower loss than smaller diameter flexible coax while still operating to 27 GHz with excellent phase and amplitude variation. 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.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

Description	Min	Тур	Max	Units	
Frequency Range	DC		27	GHz	
VSWR			1.25:1		
Velocity of Propagation		70		%	
RF Shielding	100			dB	
Capacitance		29.4 [96.4	6]	pF/ft [pF/n	n]
Phase Stability with Flexure		±3		Degrees	

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	12	18	27			GHz
Insertion Loss (Max.)	0.52	0.68	2.06			dB/ft
	1.71	2.23	6.76			dB/m
Power Handling (Max.)		70	50			W

### **Mechanical Specifications**

**Cable Assembly** 

Length\*

0 in [0 mm]



### **Configuration:**

- SMA Male
- SMA Female
- FM-195TC

### **Features:**

- Max Frequency 27 GHz
- Shielding Effectivity > 100 dB
- 70% Phase Velocity
- Triple Shielded
- FEP Jacket
- The 0.195 inch diameter has lower insertion loss
- Phase change with flexure +/-3° to 27 GHz
- Extended life with up to 5,000 mating cycles with proper care
- Flexible and durable cable with a minimum bend radius of 1 inch
- Strong Connector coax interface with heave duty booting
- Test data provided with every cable assembly
- -65° to +125° temperature range
- 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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Cable

Cable Type FM-195TC **Impedance** 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper, Silver

Dielectric Type PTFE Number of Shields

Shield Layer 1 Silver Plated Copper Braid Shield Layer 2 Silver Plated Copper Tape Shield Layer 3 Silver Plated Copper Braid

Jacket Material **FEP** 

Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]

#### **Connectors**

Description		Connector 1			Connec	ctor 2		
Туре		SMA Ma	ale		SMA Fe	male		
Impedance		50 Ohms 50 Ohms				nms	S	
Contact Material & Plating		Beryllium Copper, Gold			Beryllium Copper, Gold			
Dielectric Type		PTFE		PTF	E			
Outer Cond Material & Plati	ing				Passivated Sta	ainless S	Steel	
Body Material & Plating		Passivated Stair	nless S	Steel	Passivated Sta	ainless S	Steel	
Coupling Nut Material & Pla	ting	Passivated Stair	nless S	Steel				

## **Environmental Specifications**

**Temperature** 

-65 to +125 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:

FMTC202 - xx uu cm = Centimeters <br/>
<br/>
dlank> = Inches Length

Example: FMTC202-12 = 12 inches long cable

FMTC202-100cm = 100 cm long cable





Precision SMA Male to SMA Female Phase Stable Cable .80 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.

Click the following link to obtain additional part information: Precision SMA Male to SMA Female Phase Stable Cable .80 Coax with LF Solder FMTC202

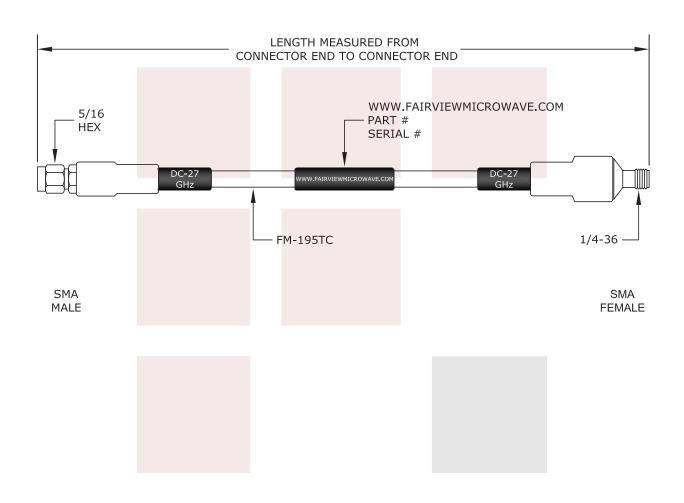
URL: https://www.fairviewmicrowave.com/sma-male-sma-female-cable-.80-coax-fmtc202-p.aspx



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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 Female Phase Stable Cable	DWG NO FMTC202			CAGE CODE 3FKR5		
.80 Coax with LF Solder	CAD FILE 072015	SHEET	SCALI	E N/A	SIZE A	2233