

FMTC103-24 DATA SHEET

Precision N Male to N Male Phase Stable Cable .80 Coax in 24 Inch with LF Solder

The type N male to type N male 24 inch cable using .80 coax, part number FMTC103-24, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male 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 FMTC103-24 type N male to type N male cable assembly operates to 18 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		18	GHz	
VSWR			1.25:1		
Velocity of Propagation		70		%	
RF Shielding	100			dB	
Capacitance		29.4 [96.46]		pF/ft [pF/m]	
Phase Stability with Flexure		±2		Degrees	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	6	12	18			GHz
Insertion Loss (Max.	.) 0.94	1.42	1.83			dB
Power Handling (Max	(.)		70			W

Mechanical Specifications

Cable Assembly

Length* Weight 24 in [609.6 mm] 0.2915 lbs [132.22 g]



Configuration:

- N Male
- N Male
- FM-195TC

Features:

- Max Frequency 18 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 +/-2° to 18 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

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 sales@fairviewmicrowave.com





Cable

Cable Type FM-195TC
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Conner Silv

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 FEP

Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Туре	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, G	old Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material & Plating	Passivated Stainless S	Steel Passivated Stainless Steel
Coupling Nut Material & Pla	ting Passivated Stainless S	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:



Example: FMTC103-12 = 12 inches long cable

FMTC103-100cm = 100 cm long cable

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Precision N Male to N Male Phase Stable Cable .80 Coax in 24 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 N Male to N Male Phase Stable Cable .80 Coax in 24 Inch with LF Solder FMTC103-24

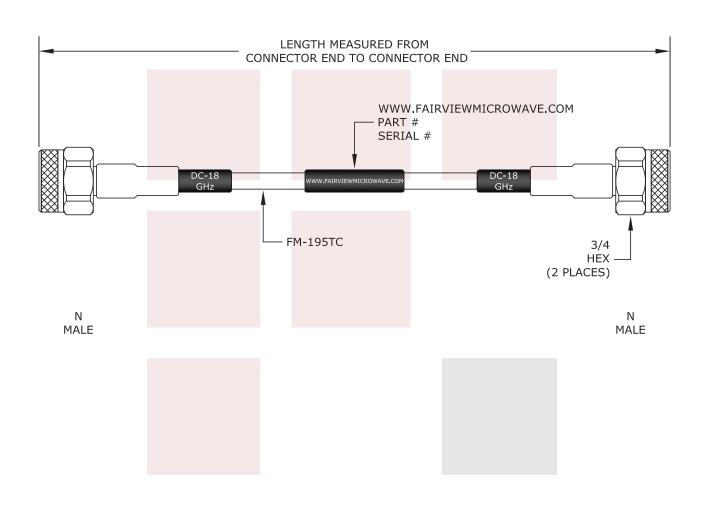
URL: https://www.fairviewmicrowave.com/n-male-n-male-cable-.80-coax-fmtc103-24-p.aspx



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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 N Male to N Male Phase Stable Cable .80 Coax in 24 Inch with LF Solder	DWG NO FMTC103			CAGE CODE 3FKR5		
	CAD FILE 072015	SHEET	SCALI	E N/A	SIZE A	2233