

Precision 2.4mm Male to RA 2.4mm Male Cable VNA High Flex Coax in 48 Inch and RoHS Compliant

Fairview Microwave's precision VNA test cables with high-flex coax are designed to provide accurate performance up to 50 GHz. The stainless steel, braided armoring provides a rugged and flexible test cable solution that exceeds 100,000 flexure cycles with proper care. Very low insertion loss and VSWR as low as 1.3:1 with phase stability of +/- 6° with flexure give these test cables excellent electrical properties for even the most demanding applications. The rugged connectors also allow up to 5,000 mating cycles when attached with proper care.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		50	GHz
VSWR			1.3:1	
Velocity of Propagation		78		%
RF Shielding	100			dB
Group Delay		1.34 [4.4]		ns/ft [ns/m]
Capacitance		26.5 [86.94]		pF/ft [pF/m]
Input Power (Average)			18	Watts
Phase Stability with Flexure		±6		Degrees

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	2.5	5	10	20	50	GHz
Insertion Loss (Max.)	1.8	2.32	3.12	4.4	7	dB
Power Handling (Max.)					18	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Length 48 in [121.92 cm]

Cable

Cable Type FM-VNA-HF
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 Tape
Shield Layer 2 Silver Plated Copper Braid
Shield Layer 3 Silver Plated Copper Braid
Jacket Diameter 0.27 in [6.86 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]
Flat Plate Crush 317 lbs/in [5.66 Kg/mm]



Configuration:

- 2.4mm Male
- 2.4mm Male Right Angle
- FM-VNA-HF

Features:

- Phase and Amplitude stable designed for VNA testing
- 1.3:1 VSWR to 50 GHz
- Excellent Amplitude and Phase stability with flexure
- Armored Cable construction is highly flexible
- Non Conductive Nomex outer sleeve
- Serialized test data for each cable assembly
- In stock and ready to ship

Applications:

- VNA Test Cables
- Probe testing to 50 GHz
- Precision Development testing
- For use in Automated Test Systems

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Connectors

Description	Connector 1	Connector 2
Type	2.4mm Male	2.4mm Male Right Angle
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	ULTEM	ULTEM
Coupling Nut Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Torque	8 in-lbs [0.9 Nm]	8 in-lbs [0.9 Nm]
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

RoHS Compliant Yes
REACH Compliant 06/15/2015

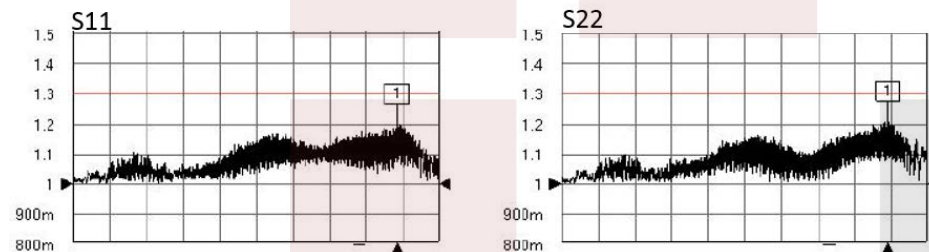
Plotted and Other Data

Notes:

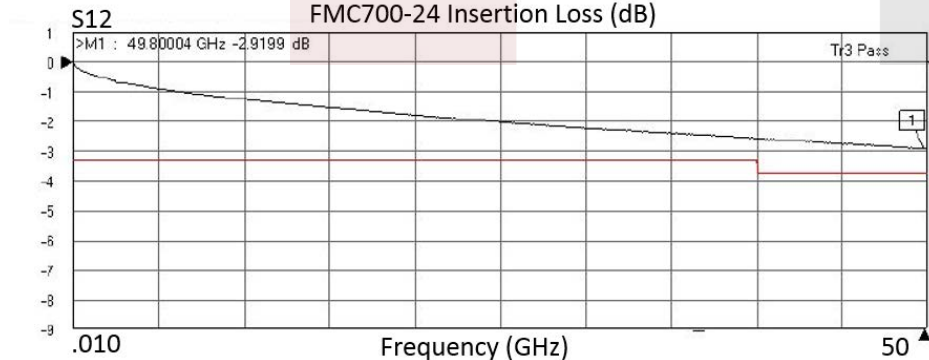
- Values at 25°C, sea level.

Typical Performance Data

FMC700-24 VSWR



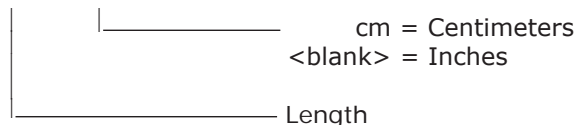
FMC700-24 Insertion Loss (dB)



How to Order

Part Number Configuration:

FMC700 - xx uu



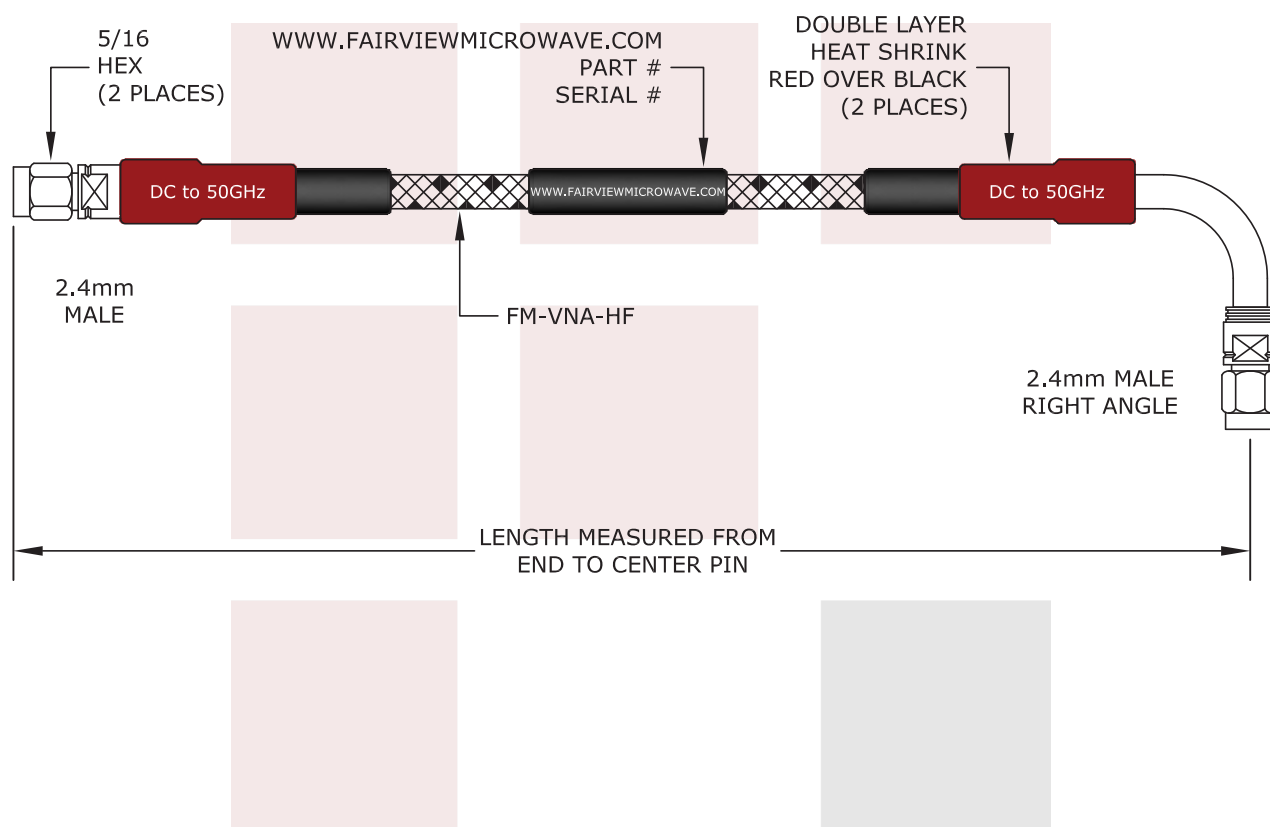
Example: FMC700-12 = 12 inches long cable
 FMC700-100cm = 100 cm long cable

Precision 2.4mm Male to RA 2.4mm Male Cable VNA High Flex Coax in 48 Inch and RoHS Compliant 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: [Precision 2.4mm Male to RA 2.4mm Male Cable VNA High Flex Coax in 48 Inch and RoHS Compliant FMC700-48](http://www.fairviewmicrowave.com/precision-2.4mm-male-ra-2.4mm-male-cable-vna-cable-coax-fmc700-48-p.aspx)

URL: <http://www.fairviewmicrowave.com/precision-2.4mm-male-ra-2.4mm-male-cable-vna-cable-coax-fmc700-48-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.



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TITLE Precision 2.4mm Male to RA 2.4mm Male Cable VNA High Flex Coax in 48 Inch and RoHS Compliant	DWG NO FMC700		CAGE CODE 3FKR5		
	CAD FILE 100815	SHEET	SCALE N/A	SIZE A	2233