

2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch

FMC4050914-48



Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Female
- Cable Type: FM-160FLEX
- Coax Flex Type: Flexible

Features

- Max Frequency 40 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Triple Shielded
- ETFE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The 2.4mm male to 2.4mm female 48 inch cable using FM160FLEX coax, part number FMC4050914-48, from Fairview Microwave is in-stock and ships same day. This Fairview 2.4mm to 2.4mm cable assembly has a male to female gender configuration with 50 ohm flexible FM-160FLEX coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC4050914-48 2.4mm male to 2.4mm female cable assembly operates to 40 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
VSWR			1.35:1	
Return Loss			-16.54	dB
Velocity of Propagation		76		%
RF Shielding	90			dB
Capacitance		26 [85.3]		pF/ft [pF/m]
Inductance		66 [216.54]		uH/ft [uH/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	3	6	12	26	40	GHz

2.4mm Male to 2.4mm Female Cable
FM160FLEX Coax in 48 Inch

FMC4050914-48



Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Insertion Loss (Max.)	0.48	0.88	1.28	1.92	2.4	dB
VSWR (Max.)	1.35:1	1.35:1	1.35:1	1.35:1	1.35:1	
Power Handling (Max.)	620	420	290	190	150	Watts

Mechanical Specifications

Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	9.95 in [252.73 mm]
Weight	0.2075 lbs [94.12 g]

Cable

Cable Type	FM-160FLEX
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
Shield Layer 2	Aluminum Tape
Shield Layer 3	Silver Plated Copper
Jacket Material	ETFE, Gray
Jacket Diameter	0.16 in [4.06 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch



FMC4050914-48

Connectors

Description	Connector 1	Connector 2
Type	2.4mm Male	2.4mm Female
Specification		IEEE-STD-P287
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Copper Clad Steel, Gold	Copper Clad Steel, Gold
Contact Plating Specification	ASTM-B488 50μ In. minimum	ASTM-B488 50μ In. minimum
Dielectric Type	PEI	PEI
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		SAE-AMS-2700
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	
Hex Size	5/16 Inch	
Torque	8 in-lbs 0.9 Nm	

Environmental Specifications

Operating Range Temperature	-65 to +165 deg C
Storage Range Temperature	-65 to +200 deg C

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

Plotted and Other Data

Notes:

2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch

FMC4050914-48



Typical Performance Data

How to Order

Part Number Configuration: **FMC4050914** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMC4050914-12 = 12 inches long cable
FMC4050914-100cm = 100 cm long cable

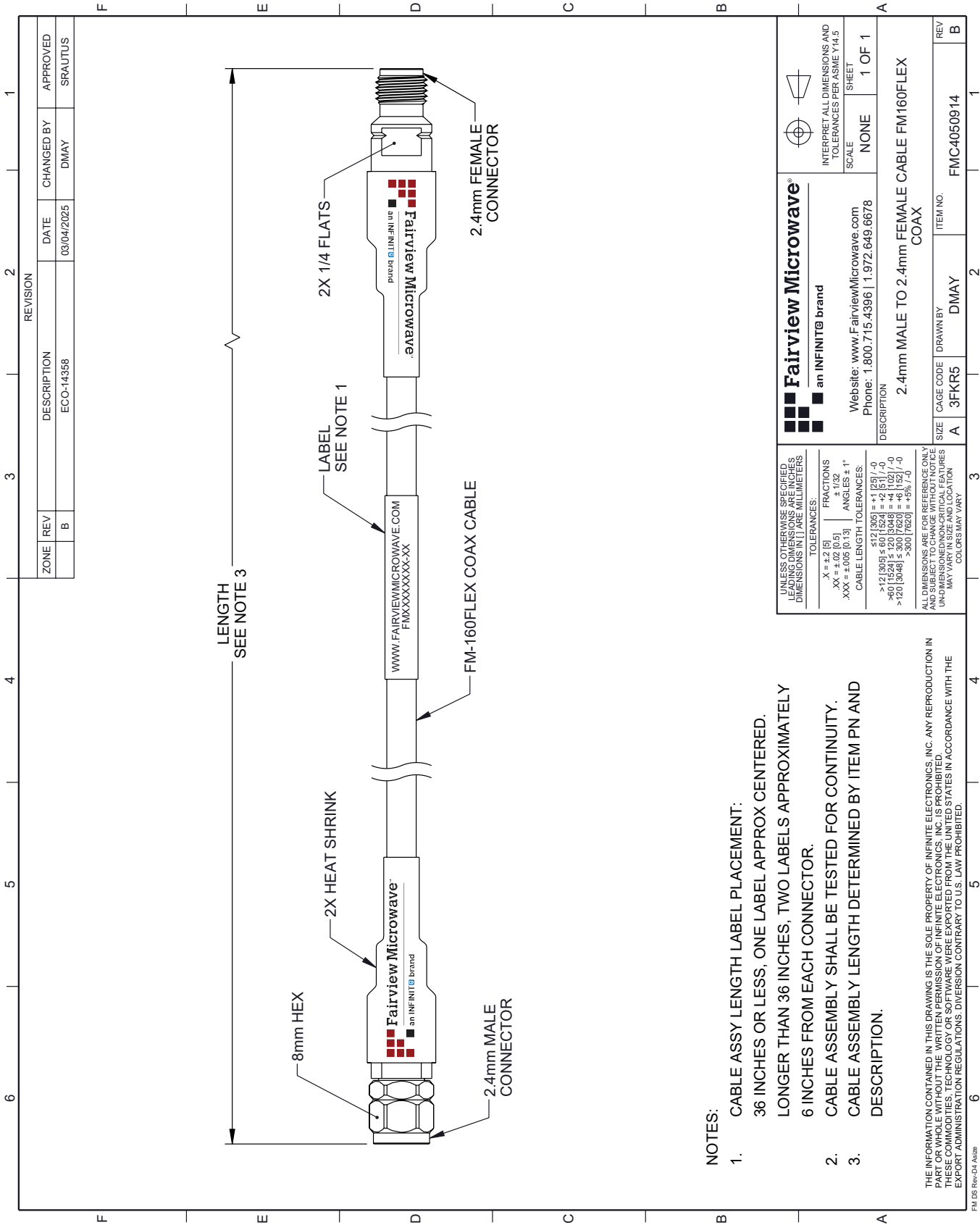
2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch FMC4050914-48](#)

URL: <https://www.fairviewmicrowave.com/2.4mm-male-2.4mm-female-cable-fm160flex-coax-fmc4050914-48-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FMC4050914-48 CAD Drawing
2.4mm Male to 2.4mm Female Cable FM160FLEX Coax in 48 Inch



NOTES:

- 1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- 2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

FM DS Rev-D4 Asize