

Low PIM 4.1/9.5 Mini DIN Male to  
7/16 DIN Female Cable TFT-5G-402 Coax in  
12 Inch Using Times Microwave Components



**FMCA2470-12**

**Configuration**

- Connector 1: 4.1/9.5 Mini DIN Male
- Connector 2: 7/16 DIN Female
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

**Features**

- Max Frequency 3 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket

**Applications**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

**Description**

The 4.1/9.5 Mini DIN male to 7/16 DIN female 12 inch cable using TFT-5G-402 coax, part number FMCA2470-12, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN to 7/16 DIN cable assembly has a male to female gender configuration with 50 ohm flexible TFT-5G-402 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The FMCA2470-12 4.1/9.5 Mini DIN male to 7/16 DIN female cable assembly operates to 3 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 80 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		3	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	80			dB
Passive Intermodulation			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				

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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		26.7 [87.6]		pF/ft [pF/m]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.24	0.26	0.29	0.32	0.41	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Width/Diameter 0.866 in [22 mm]

#### Cable

Cable Type TFT-5G-402  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PTFE  
 Number of Shields 2  
 Jacket Material FEP, Blue  
 Jacket Diameter 0.16 in [4.06 mm]  
 One Time Minimum Bend Radius 0.75 in [19.05 mm]

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## FMCA2470-12

### Connectors

Description	Connector 1	Connector 2
Type	4.1/9.5 Mini DIN Male	7/16 DIN Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	5 µm	5 µm
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		3 µm
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 µm	3 µm
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	5 µm	
Torque	106 in-lbs 11.98 Nm	22.083 ft-lbs 29.95 Nm

### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

### Plotted and Other Data

Notes:

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**FMCA2470-12**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**FMCA2470**

**- xx**

**uu**



Example: FMCA2470-12 = 12 inches long cable  
FMCA2470-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 12 Inch Using Times Microwave Components 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.

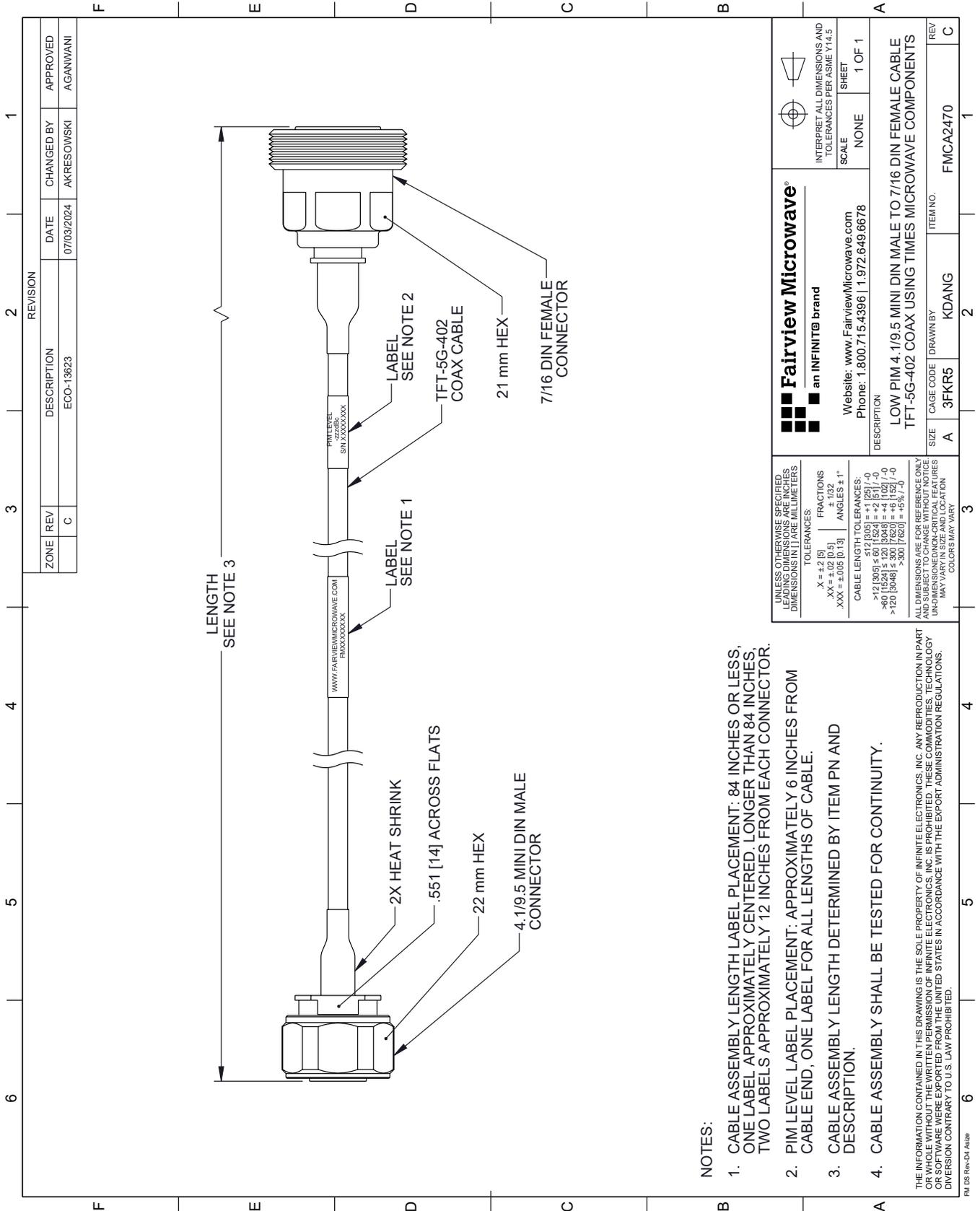
For additional information on this product, please click the following link: [Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 12 Inch Using Times Microwave Components FMCA2470-12](https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-male-7-16-din-female-cable-tft-5g-402-coax-fmca2470-12)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-male-7-16-din-female-cable-tft-5g-402-coax-fmca2470-12.html>

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# FMCA2470-12 CAD Drawing

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**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, ONE LABEL FOR ALL LENGTHS OF CABLE.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
4. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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FM DS Rev-D4 Alt2b

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	ECO-13623	AKRESOWSKI
	C			AGANWANI

<p><b>Fairview Microwave®</b> an INFINIT® brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5]      FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5]      ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&lt;math&gt;≤ 12 [305]&lt;/math&gt; ±.05 [1.27] / -0</p> <p>&gt;12 [305] &lt;math&gt;≤ 60 [1524]&lt;/math&gt; ±.1 [2.5] / -0</p> <p>&gt;60 [1524] &lt;math&gt;≤ 120 [3048]&lt;/math&gt; ±.2 [5.1] / -0</p> <p>&gt;120 [3048] &lt;math&gt;≤ 300 [7620]&lt;/math&gt; ±.4 [10.2] / -0</p> <p>&gt;300 [7620] ±.6 [15.2] / -0</p>		<p>DESCRIPTION</p> <p>LOW PIM 4:1/9.5 MINI DIN MALE TO 7/16 DIN FEMALE CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS</p>
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	FMCA2470
DRAWN BY	KDANG	