

## 2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



### FMCA2330-24

#### Configuration

- Connector 1: 2.2-5 Male
- Connector 2: 2.2-5 Male
- 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
- 100 Mating Cycles

#### Applications

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

#### Description

The 2.2-5 male to 2.2-5 male 24 inch cable using TFT-5G-402 coax, part number FMCA2330-24, from Fairview Microwave is in-stock and ships same day. This Fairview 2.2-5 to 2.2-5 cable assembly has a male to male 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 FMCA2330-24 2.2-5 male to 2.2-5 male 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				

2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



**FMCA2330-24**

**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	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.24	0.3	0.42	0.72	1.08	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  $0.1 \cdot \sqrt{f(\text{GHz})}$  dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Length	24 in [609.6 mm]
Width/Diameter	0.65 in [16.51 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]

2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



**FMCA2330-24**

**Connectors**

Description	Connector 1	Connector 2
Type	2.2-5 Male	2.2-5 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	100	100
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Contact Plating Specification	200 μin	200 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Silver
Body Plating Specification	100 μin	100 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 μin	100 μin
Torque	26 in-lbs 2.94 Nm	26 in-lbs 2.94 Nm

**Environmental Specifications**

Operating Range Temperature -40 to +125 deg C

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

**Plotted and Other Data**

Notes:

2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components

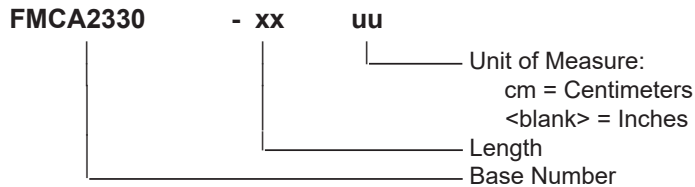


**FMCA2330-24**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example: FMCA2330-12 = 12 inches long cable  
FMCA2330-100cm = 100 cm long cable

2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax 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.

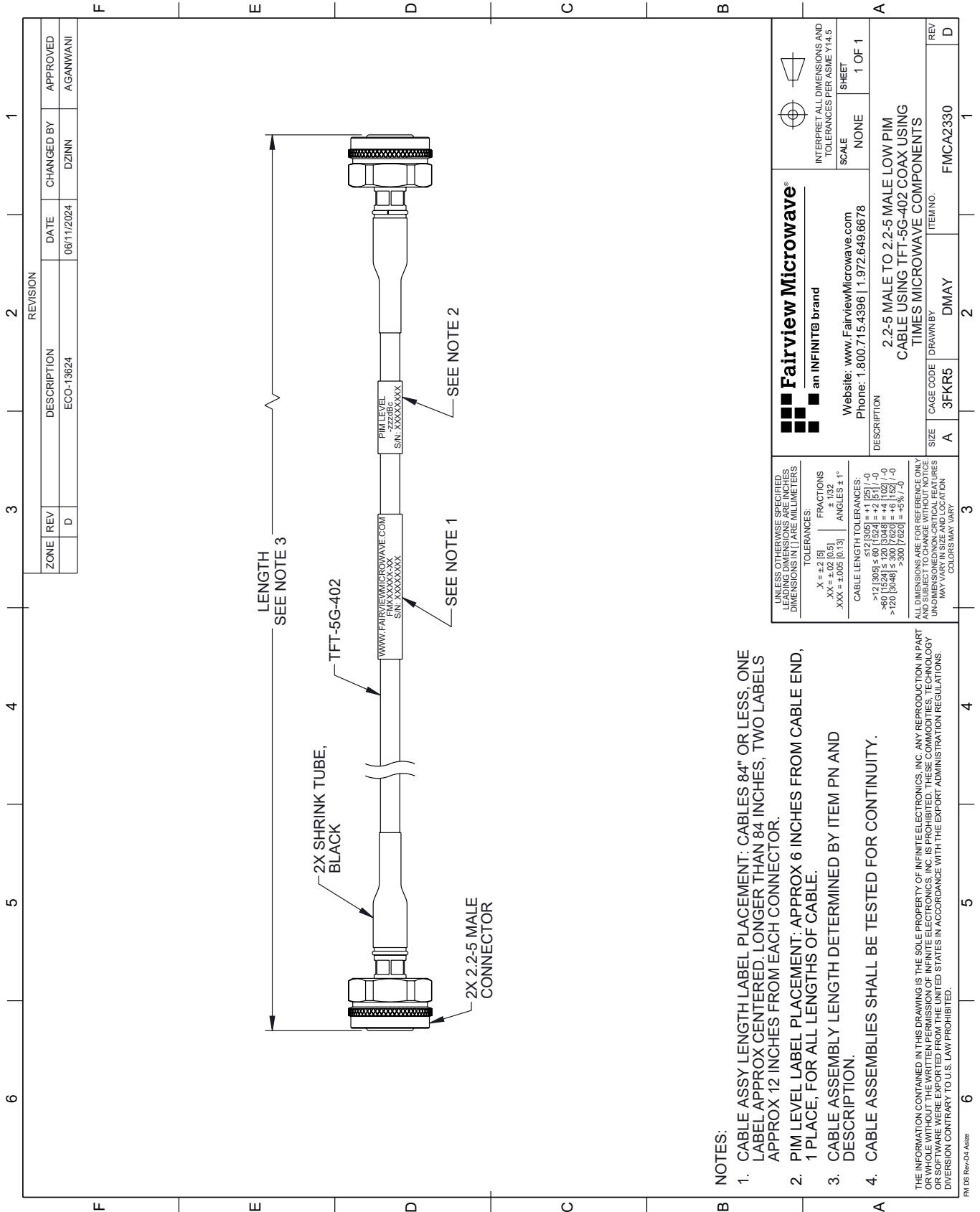
For additional information on this product, please click the following link: [2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components FMCA2330-24](https://www.fairviewmicrowave.com/low-pim-2.2-5-male-to-2.2-5-male-cable-tft-5g-402-coax-in-24-inch-using-times-microwave-components-fmca2330-24)

URL: <https://www.fairviewmicrowave.com/low-pim-2.2-5-male-to-2.2-5-male-cable-tft-5g-402-coax-in-24-inch-using-times-microwave-components-fmca2330-24-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.

# FMCA2330-24 CAD Drawing

2.2-5 Male to 2.2-5 Male Low PIM Cable 24 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



**NOTES:**

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

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. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

FM DS Rev-D4 Alt2b

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	D	08/11/2024	DZINN	AGANWANI
DESCRIPTION				
ECO-13624				

<p><b>Fairview Microwave®</b> an INFINIT® brand</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
<p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>SCALE: NONE SHEET: 1 OF 1</p>
<p>DESCRIPTION: 2.2-5 MALE TO 2.2-5 MALE LOW PIM CABLE USING TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS</p>		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	DMAY
DRAWN BY		ITEM NO.
A		FMC2330
REV	D	

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS:  
 ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 >12 [305] ≤ 60 [1524] = ±.125 [-0  
 >60 [1524] ≤ 120 [3048] = ±.150 [-0  
 >120 [3048] ≤ 300 [7620] = ±.250 [-0  
 >300 [7620] = ±.500 [-0]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.