

2.2-5 Male to 2.2-5 Female Low PIM Cable
150 CM Length Using TFT-5G-402 Coax Using
Times Microwave Components



FMCA2331-150CM

Configuration

- Connector 1: 2.2-5 Male
- Connector 2: 2.2-5 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
- 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 female 150 cm cable using TFT-5G-402 coax, part number FMCA2331-150CM, 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 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 FMCA2331-150CM 2.2-5 male to 2.2-5 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	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.44	0.54	0.74	1.3	1.96	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 $0.1 \cdot \sqrt{FGHz}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length	59.06 in [150.01 cm]
Width/Diameter	0.665 in [16.89 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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Connectors

Description	Connector 1	Connector 2
Type	2.2-5 Male	2.2-5 Female
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
Outer Conductor Material and Plating		Beryllium Copper, Silver
Outer Conductor Plating Specification		100 µin
Body Material and Plating	Brass, Silver	Brass, Silver
Body Plating Specification	100 µin	100 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	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

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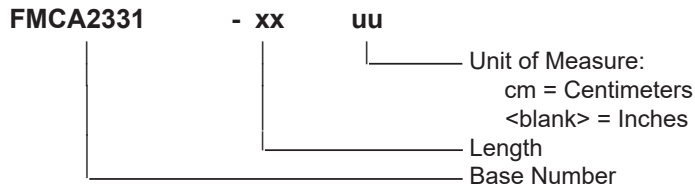


FMCA2331-150CM

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2331-12 = 12 inches long cable
FMCA2331-100cm = 100 cm long cable

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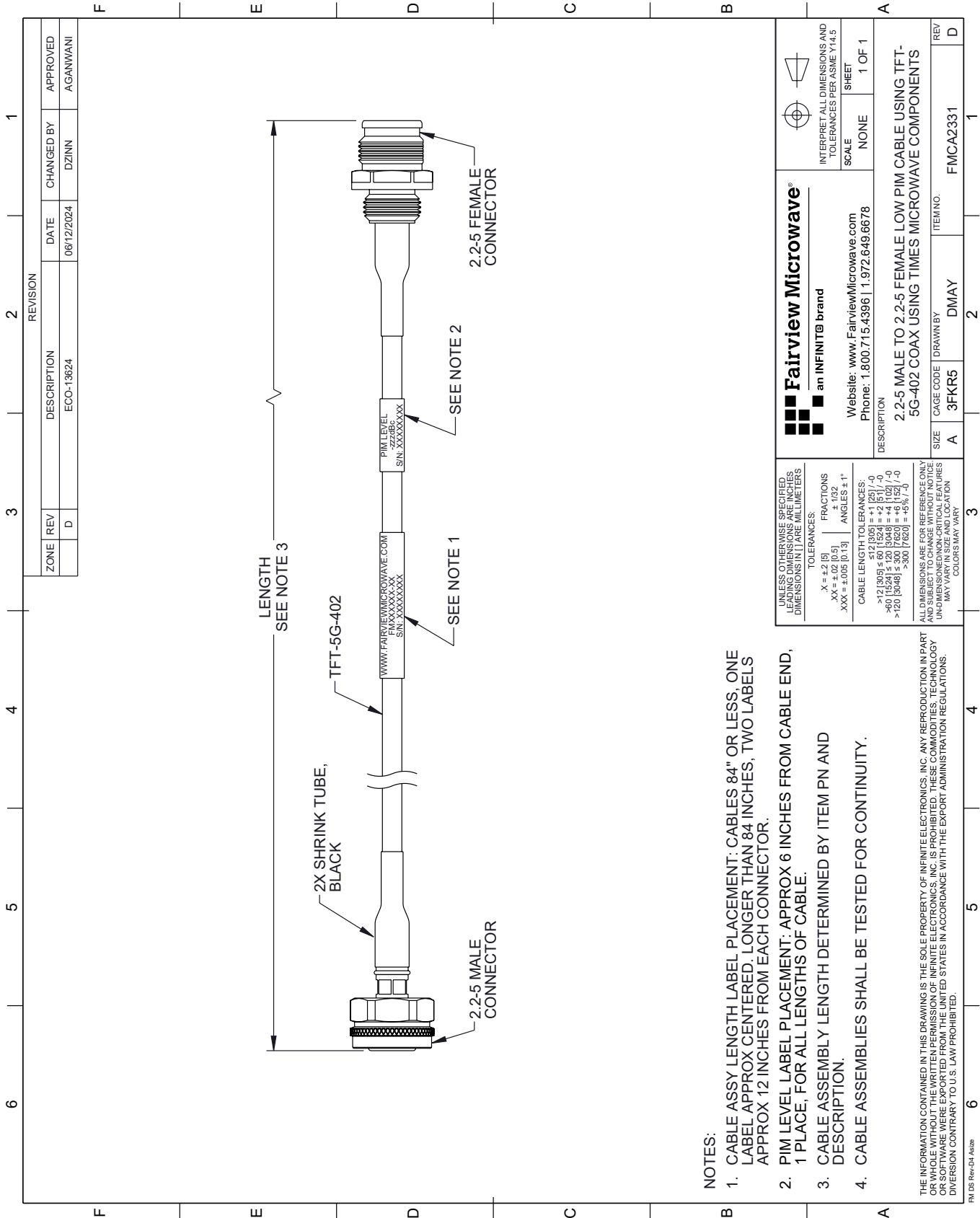
For additional information on this product, please click the following link: [2.2-5 Male to 2.2-5 Female Low PIM Cable 150 CM Length Using TFT-5G-402 Coax Using Times Microwave Components FMCA2331-150CM](https://www.fairviewmicrowave.com/low-pim-2.2-5-male-to-2.2-5-female-cable-tft-5g-402-coax-in-150-cm-using-times-microwave-components-fmca2331-150cm)

URL: <https://www.fairviewmicrowave.com/low-pim-2.2-5-male-to-2.2-5-female-cable-tft-5g-402-coax-in-150-cm-using-times-microwave-components-fmca2331-150cm-p.aspx>

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FMCA2331-150CM CAD Drawing

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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.

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

TOLERANCES:
 .X = ±.2 (5) FRACTIONS ± 1/32
 .XX = ±.02 (0.5) ANGLES ± 1°
 .XXX = ±.005 (0.13)

CABLE LENGTH TOLERANCES:
 >12 (305) ≤ 60 (1524) = ±.1 (25) / -0
 >60 (1524) ≤ 120 (3048) = ±.4 (102) / -0
 >120 (3048) ≤ 300 (7620) = ±.6 (15) / -0

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

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: 2.2-5 MALE TO 2.2-5 FEMALE LOW PIM CABLE USING TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FMCA2331