

Low PIM 2.2-5 Female to N Male Cable TFT-5G-402 Coax in 100 CM Using Times Microwave Components



FMCA2530-100CM

Configuration

- Connector 1: 2.2-5 Female
- Connector 2: N Male
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 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 2.2-5 female to type N male 100 cm cable using TFT-5G-402 coax, part number FMCA2530-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 2.2-5 to type N cable assembly has a female 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 FMCA2530-100CM 2.2-5 female to type N male cable assembly operates to 5.8 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		5.8	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.)	0.29	0.42	0.59	0.94	1.45	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*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.808 in [20.52 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 Female	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	100	500
Contact Material and Plating	Beryllium Copper, Silver	Brass, 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, Tri-Metal
Body Plating Specification	100 µin	80 µin
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin
Torque	26 in-lbs 2.94 Nm	15 in-lbs 1.7 Nm

Environmental Specifications

Operating Range Temperature -40 to +125 deg C

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

Plotted and Other Data

Notes:

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FMCA2530-100CM

Typical Performance Data

How to Order

Part Number Configuration:

FMCA2530

- xx

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: FMCA2530-12 = 12 inches long cable
FMCA2530-100cm = 100 cm long cable

Low PIM 2.2-5 Female to N Male Cable TFT-5G-402 Coax in 100 CM 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.

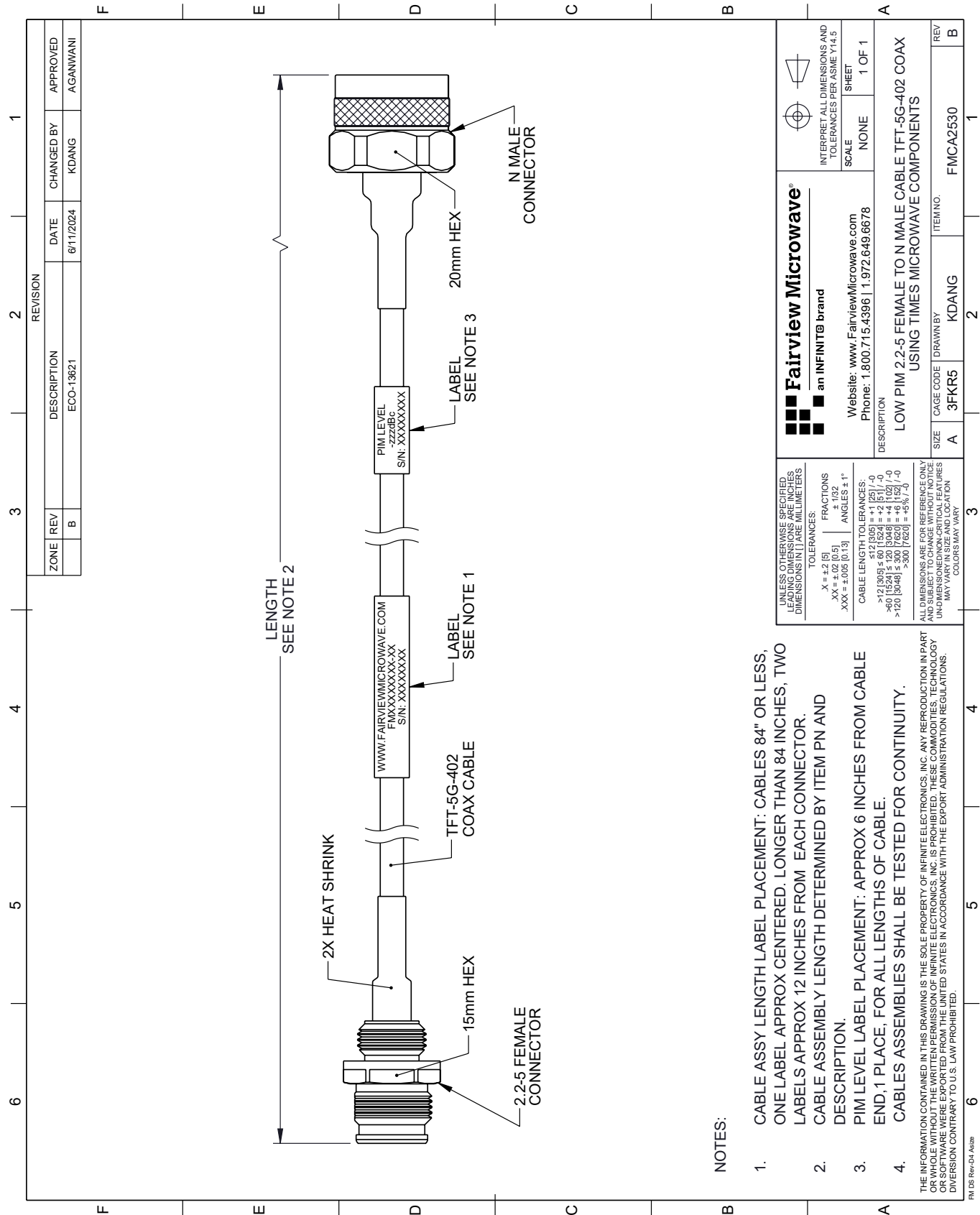
For additional information on this product, please click the following link: [Low PIM 2.2-5 Female to N Male Cable TFT-5G-402 Coax in 100 CM Using Times Microwave Components FMCA2530-100CM](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-2.2-5-female-to-n-male-cable-tft-5g-402-coax-in-100-cm-using-times-microwave-components-fmca2530-100cm.html>

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.

FMCA2530-100CM CAD Drawing

Low PIM 2.2-5 Female to N Male Cable TFT-5G-402 Coax in 100 CM Using Times Microwave Components



REVISION		DATE		CHANGED BY		APPROVED	
ZONE	REV	DESCRIPTION		ECO-13621		6/11/2024	
	B					KDANG	
						AGANWANI	

Fairview Microwave® an INFINITI® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED. DIMENSIONS IN [] ARE MILLIMETERS.		TOLERANCES:		SCALE: NONE
		X = ±.2 [5]		SHEET: 1 OF 1
		.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] = ±.125 [-0]		
		>120 [3048] ≤ 300 [7620] = ±.125 [-0]		
		>300 [7620] = ±.125 [-0]		
		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCALL-OUTED FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		
DESCRIPTION		LOW PIM 2.2-5 FEMALE TO N MALE CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS		
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	KDANG	FMCA2530	B