

Low PIM 2.2-5 Female to RA N Male Cable TFT-5G-402 Coax in 50 CM Using Times Microwave Components

FMCA2531-50CM



Configuration

- Connector 1: 2.2-5 Female
- Connector 2: N Male Right Angle
- 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 RA type N male 50 cm cable using TFT-5G-402 coax, part number FMCA2531-50CM, 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 FMCA2531-50CM 2.2-5 female to type N male cable assembly operates to 5.8 GHz. The right angle type N interface on the TFT-5G-402 cable allows for easier connections in tight spaces. 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.)	0.25	0.31	0.4	0.57	0.83	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 for the straight connector and 0.1 dB for the right angle connector.

Mechanical Specifications

Cable Assembly	
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 Female	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	100	
Contact Material and Plating	Beryllium Copper, Silver	Brass, Silver
Contact Plating Specification	200 µin	5 µm
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	3 µm
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		3 µm
Torque	26 in-lbs 2.94 Nm	10 in-lbs 1.13 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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Typical Performance Data

How to Order

Part Number Configuration: **FMCA2531 - xx uu**

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

Length

Base Number

Example: FMCA2531-12 = 12 inches long cable
FMCA2531-100cm = 100 cm long cable

Low PIM 2.2-5 Female to RA N Male Cable TFT-5G-402 Coax in 50 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 RA N Male Cable TFT-5G-402 Coax in 50 CM Using Times Microwave Components FMCA2531-50CM](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-2.2-5-female-to-ra-n-male-cable-tft-5g-402-coax-in-50-cm-using-times-microwave-components-fmca2531-50cm.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.

FMCA2531-50CM CAD Drawing

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