

Low PIM 4.1/9.5 Mini DIN Female to RA N Male Cable TFT-5G-402 Coax Using Times Microwave Components



FMCA2475

Configuration

- Connector 1: 4.1/9.5 Mini DIN 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 4.1/9.5 Mini DIN female to RA type N male cable using TFT-5G-402 coax, part number FMCA2475, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN 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 FMCA2475 4.1/9.5 Mini DIN 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.)	0.057	0.083	0.117	0.19	0.295	dB/ft
	0.19	0.27	0.38	0.62	0.97	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 \cdot \sqrt{FGHz}$ dB for the straight connector and 0.1 dB for the right angle connector.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.374 in [9.5 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	4.1/9.5 Mini DIN Female	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	500	
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	200 µin	5 µm
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	80 µin	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	3 µm
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		3 µm
Torque		10 in-lbs 1.13 Nm

Environmental Specifications

Operating Range Temperature -55 to +85 deg C

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

Plotted and Other Data

Notes:

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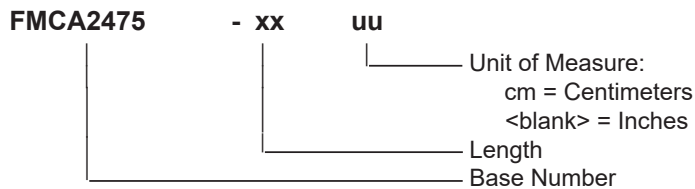


FMCA2475

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2475-12 = 12 inches long cable
FMCA2475-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Female to RA N Male Cable 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.

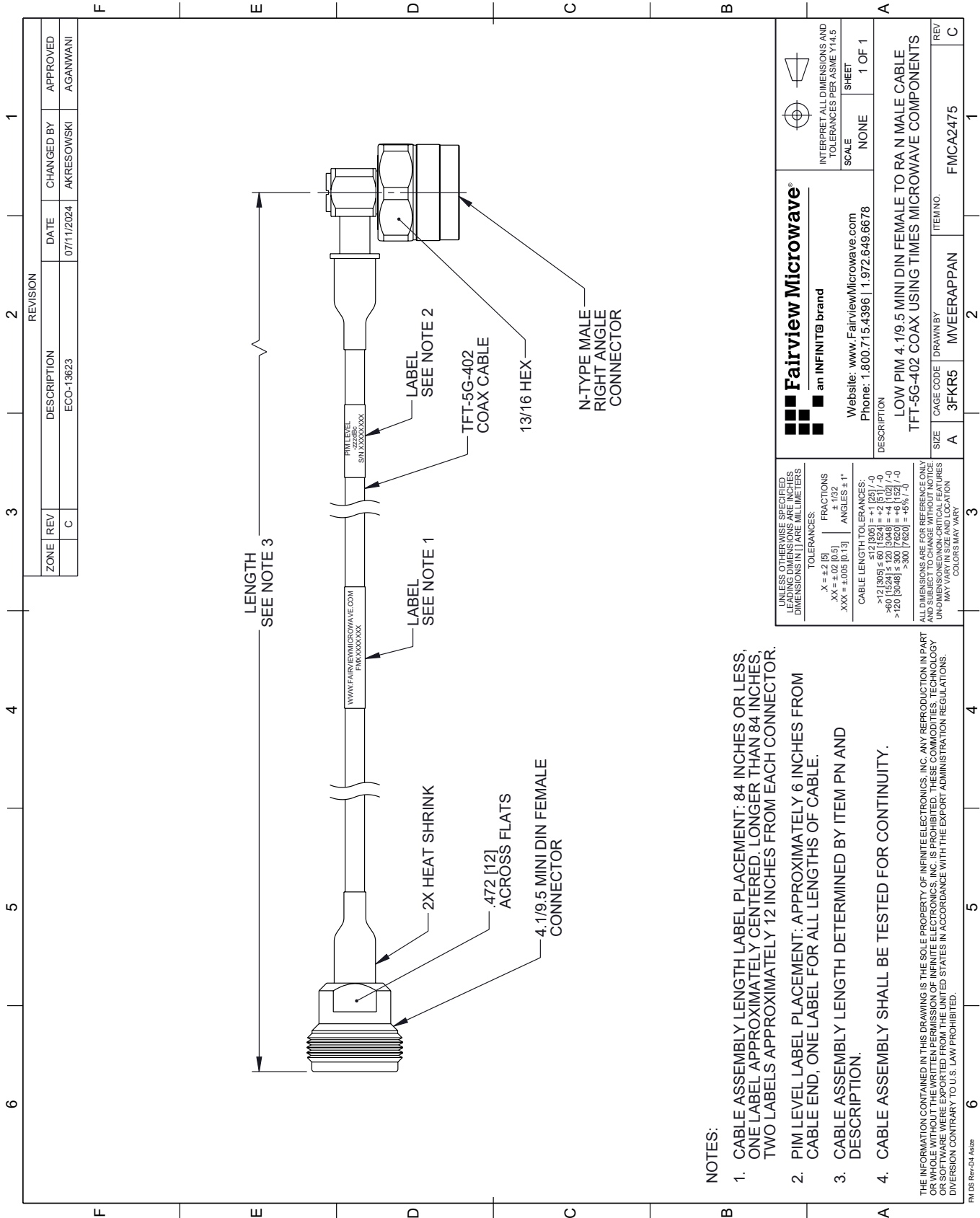
For additional information on this product, please click the following link: [Low PIM 4.1/9.5 Mini DIN Female to RA N Male Cable TFT-5G-402 Coax Using Times Microwave Components FMCA2475](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-female-ra-n-male-cable-tft-5g-402-coax-fmca2475.html>

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FMCA2475 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY 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			
	C	07/11/2024	AKRESOWSKI	AGANWANI
DESCRIPTION				
ECO-13623				

<p>Fairview Microwave® an INFINIT® brand</p> <p>Website: www.FairviewMicrowave.com 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>DESCRIPTION</p> <p>LOW PIM 4.1/9.5 MINI DIN FEMALE TO RA N MALE CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS</p>		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	MVEERAPPAN
DRAWN BY		REV
MVEERAPPAN		C
FMC A2475		1

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

TOLERANCES:

.X = ±.2 [5] FRACTIONS ±.132

.XX = ±.02 [0.5] ±.132

.XXX = ±.005 [0.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:

<12 [305] ±.60 [15.24] = ±.2 [5] / -0

>12 [305] ≤.60 [15.24] = ±.2 [5] / -0

>.60 [15.24] ≤.120 [3048] = ±.4 [10.2] / -0

>.120 [3048] ≤.300 [7620] = ±.6 [15.2] / -0

>.300 [7620] = ±.6 [15.2] / -0

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