

Low PIM 4.1/9.5 Mini DIN Female to RA 4.3-10 Male Cable TFT-5G-402 Coax Using Times Microwave Components



FMCA2461

Configuration

- Connector 1: 4.1/9.5 Mini DIN Female
- Connector 2: 4.3-10 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
- 500 Mating Cycles

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 4.3-10 male cable using TFT-5G-402 coax, part number FMCA2461, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN to 4.3-10 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 FMCA2461 4.1/9.5 Mini DIN female to 4.3-10 male cable assembly operates to 5.8 GHz. The right angle 4.3-10 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 per connector.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.86 in [21.84 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	4.3-10 Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	200 µin	200 µin
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	80 µin
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin
Torque		44 in-lbs 4.97 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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FMCA2461

Typical Performance Data

How to Order

Part Number Configuration:

FMCA2461

- xx

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

Example: FMCA2461-12 = 12 inches long cable
FMCA2461-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Female to RA 4.3-10 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.

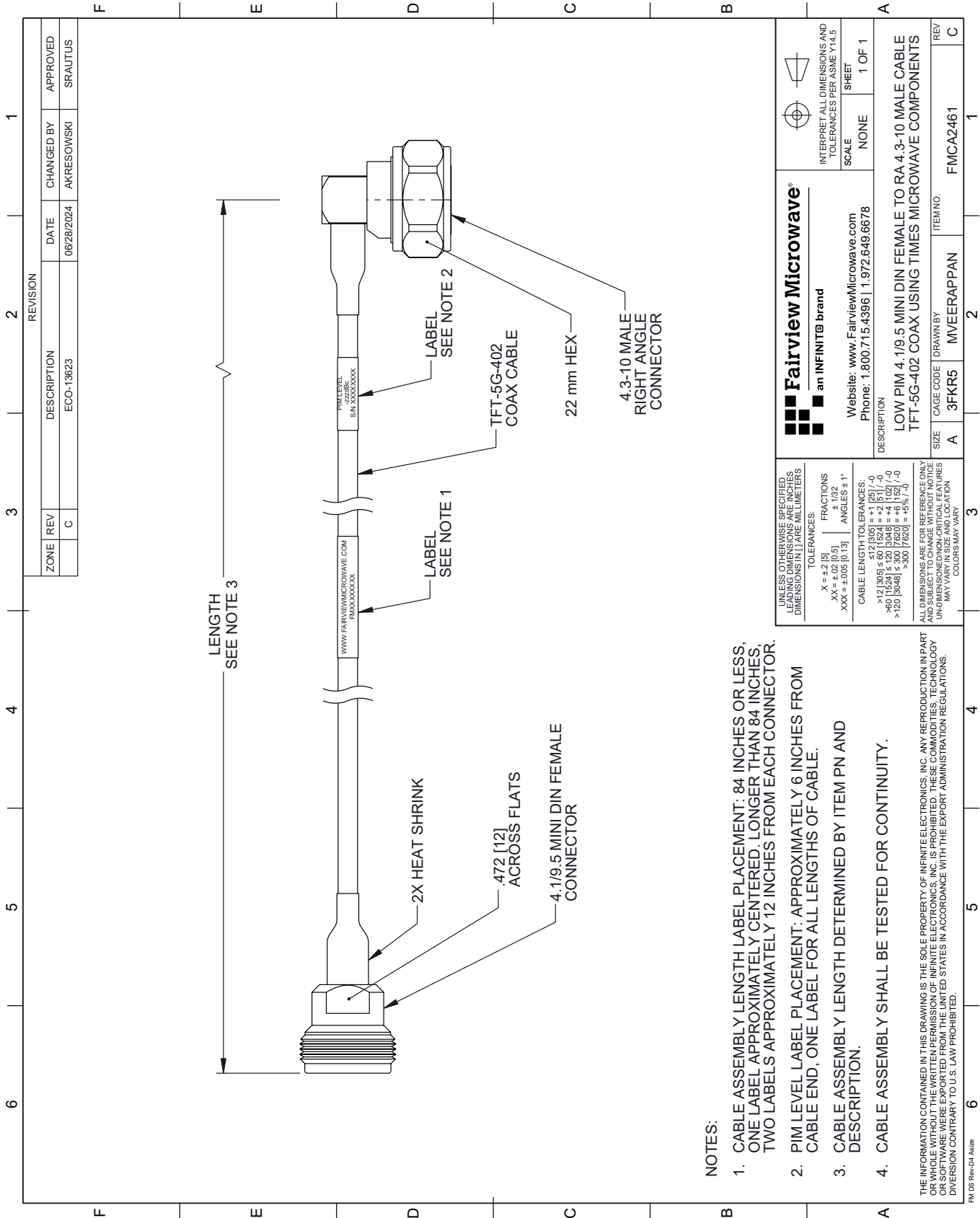
For additional information on this product, please click the following link: [Low PIM 4.1/9.5 Mini DIN Female to RA 4.3-10 Male Cable TFT-5G-402 Coax Using Times Microwave Components FMCA2461](https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-female-ra-4.3-10-male-cable-tft-5g-402-coax-fmca2461)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-female-ra-4.3-10-male-cable-tft-5g-402-coax-fmca2461.html>

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FMCA2461 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH 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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<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>X = ±.2 [5] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5] ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p><12 [305] ≤ 60 [1524] = ±.1 [25] / -0</p> <p>>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0</p> <p>>120 [3048] ≤ 300 [7620] = ±.6 [152] / -0</p>		
<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONS/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION</p> <p>LOW PIM 4.1/9.5 MINI DIN FEMALE TO RA 4.3-10 MALE CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS</p>	<p>SIZE</p> <p>A</p>	<p>REV</p> <p>C</p>
<p>ITEM NO.</p> <p>FMC42461</p>	<p>DRAWN BY</p> <p>MVEERAPPAN</p>	<p>1</p>