

# FMCA2416 DATA SHEET

# Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-402 Coax Using Times Microwave Components

The 4.1/9.5 Mini DIN male to 7/16 DIN female cable using TFT-402 coax, part number FMCA2416, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN to 7/16 DIN cable assembly has a male to female gender configuration with 50 ohm flexible TFT-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 FMCA2416 4.1/9.5 Mini DIN male to 7/16 DIN 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	Min	Т	ур	Max	Units
Frequency Range	DC			3	GHz
VSWR				1.4:1	
Velocity of Propagation		-	76		%
RF Shielding	-80				dB
Passive Intermodulation				-160	dBc

Capacitance		26.7 [87.6]	pF/ft [pF/m]
DC Resistance Inner Cor	nductor	8.5 [27.89]	Ω/1000ft [Ω/Km]
DC Resistance Outer Cor	nductor	5.6 [18.37]	Ω/1000ft [Ω/Km]

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.032	0.052	0.076	0.108	0.188	dB/ft
	0.1	0.17	0.25	0.35	0.62	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.1\ dB$  per connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Diameter 0.866 in [22 mm]

#### Cable

Cable Type TFT-402 Impedance 50 Ohms



## **Configuration:**

- 4.1/9.5 Mini DIN Male
- 7/16 DIN Female
- TFT-402

#### Features:

- Max Frequency 3 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

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Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields

Shield Layer 1 Shield Layer 2

Jacket Material Jacket Diameter

Jacket Diameter

Solid

Copper, Silver

PTFE 2

Silver Plated Copper Braid

Tinned Copper Braid

FEP, Blue

0.16 in [4.06 mm]

One Time Minimum Bend Radius 0.75 in [19.05 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	4.1/9.5 Mini DIN M	lale 7/16 DIN Female
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Silver	Brass, Silver
Contact Plating Spec.	5 μm	5 μm
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating Brass, Tri-Me		
Outer Cond Plating Spec.		3 μm
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	2 µm	3 µm
Coupling Nut Material & Pla	iting Brass, Nickel	
Coupling Nut Plating Spec.	5 μm	
Torque	106 in-lbs 11.98 N	Nm 22.083 ft-lbs 29.95 Nm

**Environmental Specifications** 

Temperature

Operating Range

-40 to +85 deg C

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data** 

Notes:

**How to Order** 

Part Number Configuration:

FMCA2416 - xx uu | cm = Centimeters | chlank> = Inches | Length

Example: FMCA2416-12 = 12 inches long cable

FMCA2416-100cm = 100 cm long cable

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Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-402 Coax Using Times Microwave Components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-402 Coax Using Times Microwave Components FMCA2416

URL: https://www.fairviewmicrowave.com/low-pim-4.1-9.5-mini-din-male-7-16-din-female-cable-tft-402-coax-fmca2416-p.aspx







