

## Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 60 Inch Using Times Microwave Components

### FMCA2470-60



#### Configuration

- Connector 1: 4.1/9.5 Mini DIN Male
- Connector 2: 7/16 DIN Female
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

#### 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

#### Description

The 4.1/9.5 Mini DIN male to 7/16 DIN female 60 inch cable using TFT-5G-402 coax, part number FMCA2470-60, 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-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 FMCA2470-60 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                                | Minimum | Typical | Maximum | Units |
|--------------------------------------------|---------|---------|---------|-------|
| Frequency Range                            | DC      |         | 3       | 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 |         |         |         |       |

Low PIM 4.1/9.5 Mini DIN Male to  
7/16 DIN Female Cable TFT-5G-402 Coax in  
60 Inch Using Times Microwave Components

## FMCA2470-60



### 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             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Typ.) | 0.38 | 0.49 | 0.62 | 0.79 | 1.24 | 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 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Width/Diameter 0.866 in [22 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]

Low PIM 4.1/9.5 Mini DIN Male to  
7/16 DIN Female Cable TFT-5G-402 Coax in  
60 Inch Using Times Microwave Components

FMCA2470-60



Connectors

| Description                           | Connector 1           | Connector 2            |
|---------------------------------------|-----------------------|------------------------|
| Type                                  | 4.1/9.5 Mini DIN Male | 7/16 DIN Female        |
| Impedance                             | 50 Ohms               | 50 Ohms                |
| Configuration                         | Straight              | Straight               |
| Contact Material and Plating          | Brass, Silver         | Brass, Silver          |
| Contact Plating Specification         | 5 µm                  | 5 µm                   |
| Dielectric Type                       | PTFE                  | PTFE                   |
| Outer Conductor Material and Plating  |                       | Brass, Tri-Metal       |
| Outer Conductor Plating Specification |                       | 3 µm                   |
| Body Material and Plating             | Brass, Tri-Metal      | Brass, Tri-Metal       |
| Body Plating Specification            | 2 µm                  | 3 µm                   |
| Coupling Nut Material and Plating     | Brass, Nickel         |                        |
| Coupling Nut Plating Specification    | 5 µm                  |                        |
| Torque                                | 106 in-lbs 11.98 Nm   | 22.083 ft-lbs 29.95 Nm |

Environmental Specifications

Operating Range Temperature-40 to +85 deg C

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

Plotted and Other Data

Notes:

Low PIM 4.1/9.5 Mini DIN Male to  
7/16 DIN Female Cable TFT-5G-402 Coax in  
60 Inch Using Times Microwave Components

## FMCA2470-60



### Typical Performance Data

### How to Order

Part Number Configuration:

**FMCA2470**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA2470-12 = 12 inches long cable  
FMCA2470-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 60 Inch 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 Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 60 Inch Using Times Microwave Components FMCA2470-60](https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-male-7-16-din-female-cable-tft-5g-402-coax-fmca2470-60)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.1-9.5-mini-din-male-7-16-din-female-cable-tft-5g-402-coax-fmca2470-60.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.

## Low PIM 4.1/9.5 Mini DIN Male to 7/16 DIN Female Cable TFT-5G-402 Coax in 60 Inch Using Times Microwave Components

