

## Low PIM 7/16 DIN Male to N Female Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components



### FMCA2506-24

#### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: N Female
- 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 7/16 DIN male to type N female 24 inch cable using TFT-5G-402 coax, part number FMCA2506-24, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to type N 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 FMCA2506-24 7/16 DIN male to type N female cable assembly operates to 5.8 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      |         | 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.) | 0.32 | 0.37 | 0.44 | 0.58 | 0.79 | 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

1.25 in [31.75 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                                  | 7/16 DIN Male          | N Female                |
| Impedance                             | 50 Ohms                | 50 Ohms                 |
| Configuration                         | Straight               | Straight                |
| Mating Cycles                         |                        | 500                     |
| Contact Material and Plating          | Brass, Silver          | Phosphor Bronze, 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            | 3 µm                   | 3 µm                    |
| Coupling Nut Material and Plating     | Brass, Tri-Metal       |                         |
| Coupling Nut Plating Specification    | 3 µm                   |                         |
| Torque                                | 22.083 ft-lbs 29.95 Nm | 10 in-lbs 1.13 Nm       |

Environmental Specifications

Operating Range Temperature-55 to +125 deg C

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

Plotted and Other Data

Notes:

## Low PIM 7/16 DIN Male to N Female Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components



### FMCA2506-24

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA2506**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

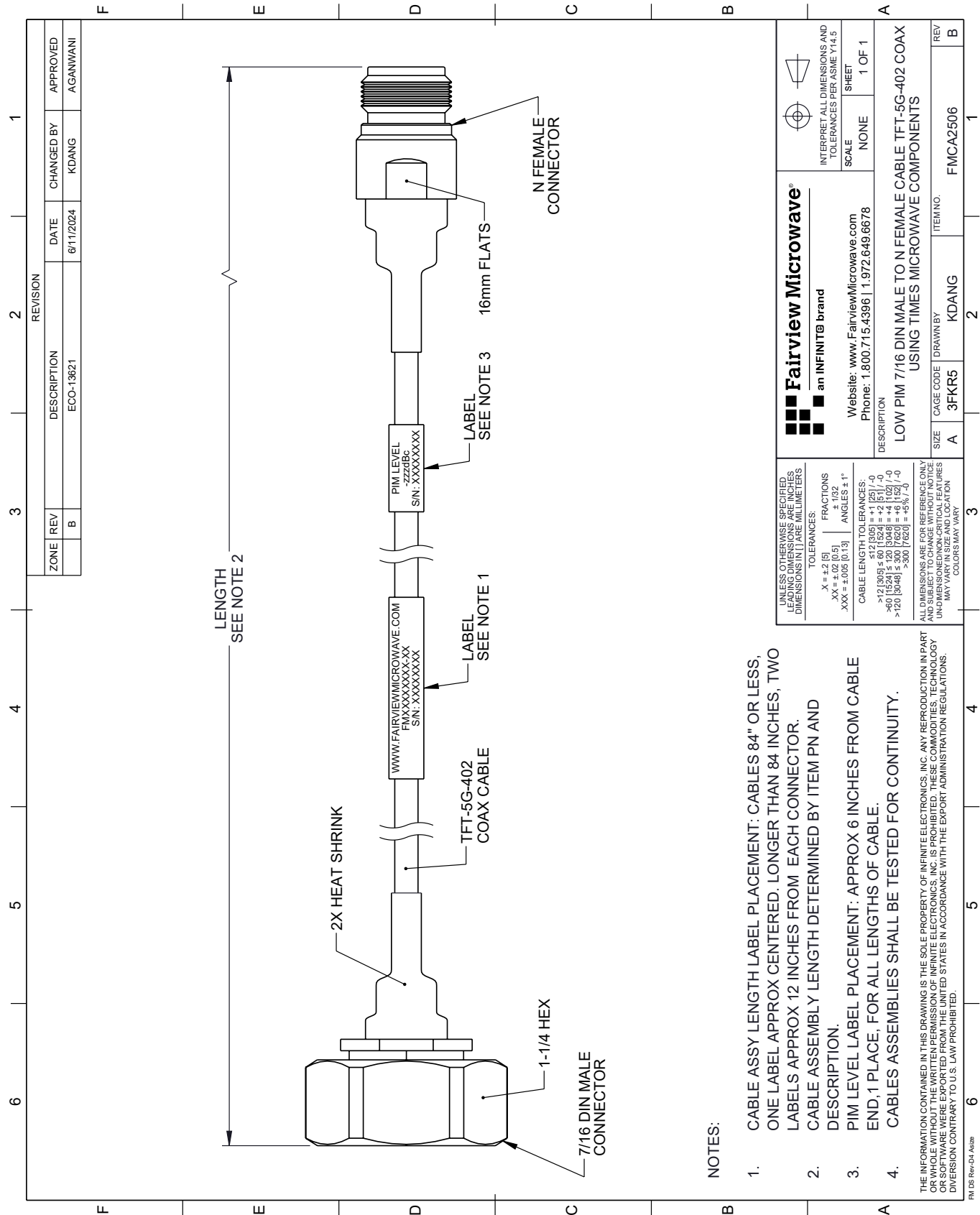
Example: FMCA2506-12 = 12 inches long cable  
FMCA2506-100cm = 100 cm long cable

Low PIM 7/16 DIN Male to N Female Cable TFT-5G-402 Coax in 24 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 7/16 DIN Male to N Female Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components FMCA2506-24](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-7-16-din-male-to-n-female-cable-tft-5g-402-coax-in-24-inch-using-times-microwave-components-fmca2506-24.html>

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- NOTES:
- CABLE ASSY LENGTH LABEL PLACEMENT: CABLES 84" OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROX 12 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
  - PIM LEVEL LABEL PLACEMENT: APPROX 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
  - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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