

Low PIM RA 7/16 DIN Male to RA N Male Cable TFT-5G-402 Coax in 48 Inch Using Times Microwave Components



FMCA2513-48

Configuration

- Connector 1: 7/16 DIN Male Right Angle
- 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 RA 7/16 DIN male to RA type N male 48 inch cable using TFT-5G-402 coax, part number FMCA2513-48, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to type N cable assembly has a male 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 FMCA2513-48 7/16 DIN male to type N male cable assembly operates to 5.8 GHz. The right angle 7/16 DIN and right angle type N interfaces on the TFT-5G-402 cable allow 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.) | 0.45 | 0.56 | 0.69 | 0.98 | 1.4 | 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 0.12 dB for the 7/16 DIN connector and 0.1 dB for the N 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]

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|---------------------------|--------------------|
| Type | 7/16 DIN Male Right Angle | N Male Right Angle |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Right Angle | Right Angle |
| Contact Material and Plating | Brass, Silver | Brass, Silver |
| Contact Plating Specification | 200 µin | 5 µm |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 100 µin | 3 µm |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 100 µin | 3 µm |
| Torque | 22.083 ft-lbs 29.95 Nm | 10 in-lbs 1.13 Nm |

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Environmental Specifications

Operating Range Temperature -55 to +150 deg C

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

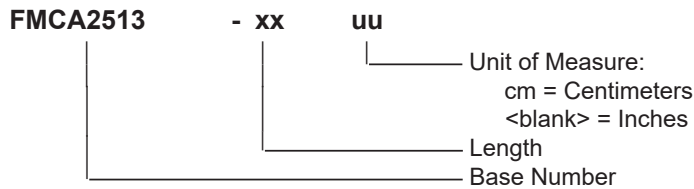
Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2513-12 = 12 inches long cable
FMCA2513-100cm = 100 cm long cable

Low PIM RA 7/16 DIN Male to RA N Male Cable TFT-5G-402 Coax in 48 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.

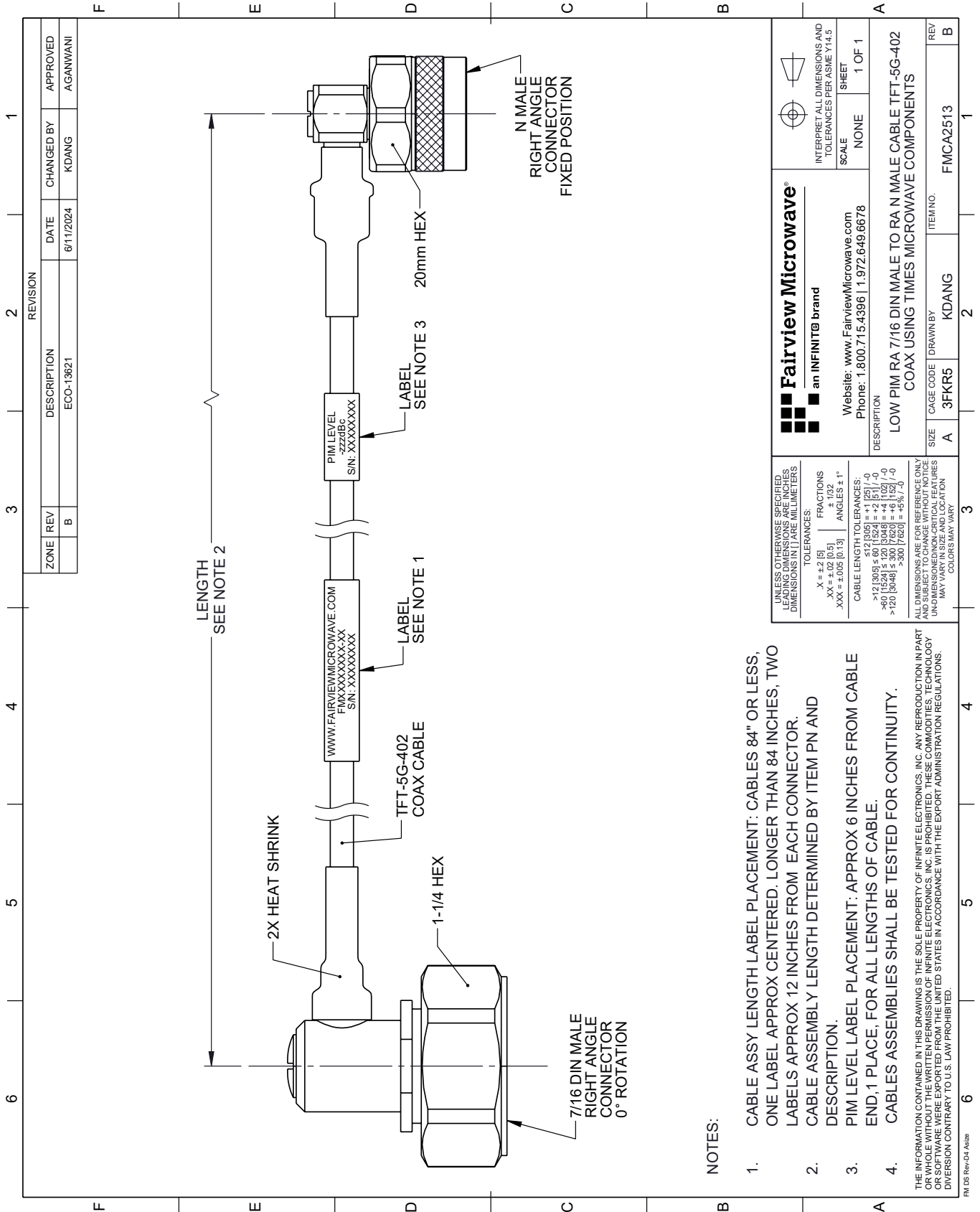
For additional information on this product, please click the following link: [Low PIM RA 7/16 DIN Male to RA N Male Cable TFT-5G-402 Coax in 48 Inch Using Times Microwave Components FMCA2513-48](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-ra-7-16-din-male-to-ra-n-male-cable-tft-5g-402-coax-in-48-inch-using-times-microwave-components-fmca2513-48.html>

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FMCA2513-48 CAD Drawing

Low PIM RA 7/16 DIN Male to RA N Male Cable TFT-5G-402 Coax in 48 Inch Using Times Microwave Components



| REVISION | | DATE | CHANGED BY | APPROVED |
|-------------|-----|-----------|------------|----------|
| ZONE | REV | | | |
| | B | 6/11/2024 | KDANG | AGANWANI |
| DESCRIPTION | | | | |
| ECO-13621 | | | | |

Fairview Microwave
an INFINITO brand

Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

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

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS: ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. COLORS MAY VARY.

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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