

Low PIM 2.2-5 Female to N Female Bulkhead Cable TFT-402-LF Coax Using Times Microwave Components

The 2.2-5 female to type N female bulkhead cable using TFT-402-LF coax, part number FMCA2533, from Fairview Microwave is in-stock and ships same day. This Fairview 2.2-5 to type N cable assembly has a female to female gender configuration with 50 ohm flexible TFT-402-LF 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 FMCA2533 2.2-5 female to type N female cable assembly operates to 5.8 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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 | Typ | Max | Units |
|-------------------------|-----|-------------|-------|--------------|
| Frequency Range | DC | | 5.8 | 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] |

Performance 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 $0.1 \cdot \sqrt{F(\text{GHz})}$ dB for the 2.2-5 connector and 0.1 dB for the N connector.

Mechanical Specifications

Cable Assembly

Diameter 0.748 in [19 mm]

Cable

Cable Type TFT-402-LF



Configuration:

- 2.2-5 Female
- N Female Bulkhead
- TFT-402-LF

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

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| | |
|--------------------------------------|--------------------|
| 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 | 2.2-5 Female | N Female |
| Mount Method | | Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 100 | |
| Contact Material & Plating | Beryllium Copper, Silver | Brass, Silver |
| Contact Plating Spec. | 200 µin | 5 µm |
| Dielectric Type | PTFE | PTFE |
| Outer Cond Material & Plating | Beryllium Copper, Silver | Brass, Tri-Metal |
| Outer Cond Plating Spec. | 100 µin | 3 µm |
| Body Material & Plating | Brass, Silver | Brass, Tri-Metal |
| Body Plating Spec. | 100 µin | 3 µm |
| Torque | 26 in-lbs 2.94 Nm | 10 in-lbs 1.13 Nm |

Environmental Specifications

Temperature

Operating Range -40 to +125 deg C

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

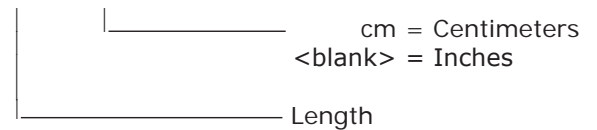
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA2533 - xx uu



Example: FMCA2533-12 = 12 inches long cable
FMCA2533-100cm = 100 cm long cable

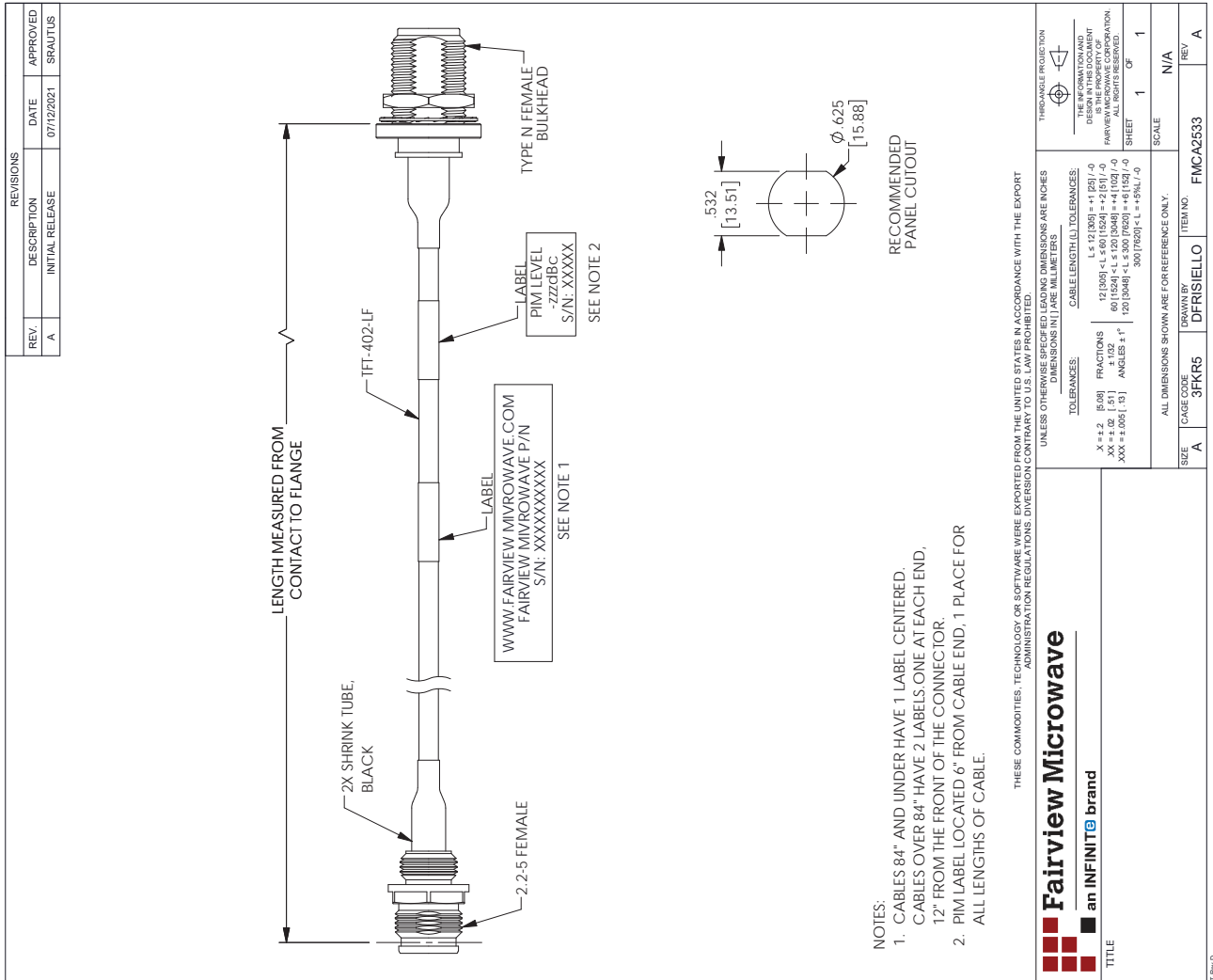
Low PIM 2.2-5 Female to N Female Bulkhead Cable TFT-402-LF Coax Using Times Microwave Components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low PIM 2.2-5 Female to N Female Bulkhead Cable TFT-402-LF Coax Using Times Microwave Components FMCA2533](#)

URL: <https://www.fairviewmicrowave.com/low-pim-2.2-5-female-n-female-cable-tft-402-lf-coax-fmca2533-p.aspx>

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