

Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 100 CM Using Times Microwave Components

The 1.0/2.3 plug to 1.0/2.3 plug 100 cm cable using TFT-402 coax, part number FMCA2297-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 1.0/2.3 to 1.0/2.3 cable assembly has a plug to plug 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 -150 dBc. The FMCA2297-100CM 1.0/2.3 plug to 1.0/2.3 plug 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 | Min | Typ | Max | Units |
|-------------------------------|-----|-------------|-------|----------------------------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 76 | | % |
| RF Shielding | -80 | | | dB |
| Passive Intermodulation | | | -150 | dBc |
| Capacitance | | 26.7 [87.6] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 8.5 [27.89] | | Ω /1000ft [Ω /Km] |
| DC Resistance Outer Conductor | | 5.6 [18.37] | | Ω /1000ft [Ω /Km] |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|-----|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.28 | 0.4 | 0.56 | 0.89 | 1.36 | 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 $0.1 \cdot \text{SQRT}(\text{FGHz})$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|-------------------|
| Length* | 39.37 in [100 cm] |
| Diameter | 0.33 in [8.38 mm] |

Cable

| | |
|------------|---------|
| Cable Type | TFT-402 |
|------------|---------|



Configuration:

- 1.0/2.3 Plug
- 1.0/2.3 Plug
- TFT-402

Features:

- Max Frequency 5.8 GHz
- Low PIM: -150 dBc Max
- Shielding Effectivity > -80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles

Applications:

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

| | |
|--------------------------------------|----------------------------|
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Braid |
| Shield Layer 2 | Tinned Copper Braid |
| 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 | 1.0/2.3 Plug | 1.0/2.3 Plug |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material & Plating | Brass, Silver | Brass, Silver |
| Contact Plating Spec. | 200 µin | 200 µin |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Spec. | 80 µin | 80 µin |
| Coupling Nut Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Spec. | 80 µin | 80 µin |

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:

FMCA2297 - xx uu

_____ cm = Centimeters
 _____ <blank> = Inches
 _____ Length

Example: FMCA2297-12 = 12 inches long cable
 FMCA2297-100cm = 100 cm long cable

Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 100 CM 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.

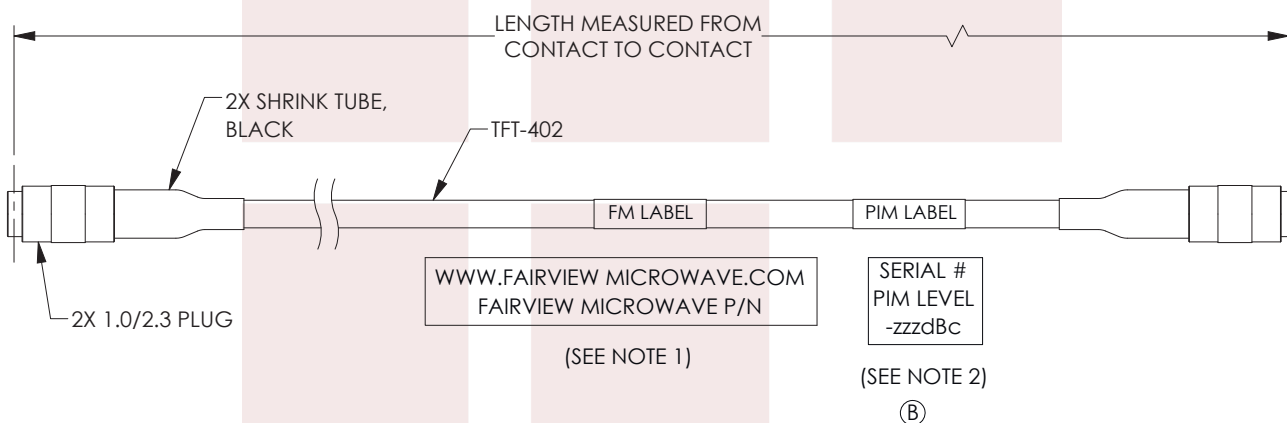
Click the following link to obtain additional part information: [Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 100 CM Using Times Microwave Components FMCA2297-100CM](https://www.fairviewmicrowave.com/low-pim-1.0-2.3-plug-1.0-2.3-plug-cable-tft-402-coax-fmca2297-100cm-p.aspx)

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| REVISIONS | | | |
|-----------|-----------------------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 04/10/2021 | SELLIS |
| B | ADD PIM LABEL, UPDATE NOTES | 8/3/21 | |



NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12" FROM THE FRONT OF THE CONNECTOR.
2. PIM 6" FROM CABLE END 1 PLACE.

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| <p>Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 100 CM Using Times Microwave Components</p> | | <p>CABLE LENGTH (L) TOLERANCES:</p> | | <p>SHEET 1 OF 1</p> | |
| <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | | <p>SCALE N/A</p> | | <p>SIZE A</p> | |
| <p>CAGE CODE 3FKR5</p> | | <p>DRAWN BY DFRISIELLO</p> | | <p>ITEM NO. FMCA2297</p> | |
| <p>REV B</p> | | <p>REV B</p> | | <p>REV B</p> | |

T-Rev.D