

Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 24 Inch Using Times Microwave Components

The 1.0/2.3 plug to 1.0/2.3 plug 24 inch cable using TFT-402 coax, part number FMCA2297-24, 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 FMCA2297-24 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.)	0.21	0.3	0.42	0.67	1.02	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*	24 in [609.6 mm]
Diameter	0.33 in [8.38 mm]

Cable

Cable Type	TFT-402
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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

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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 24 Inch 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.

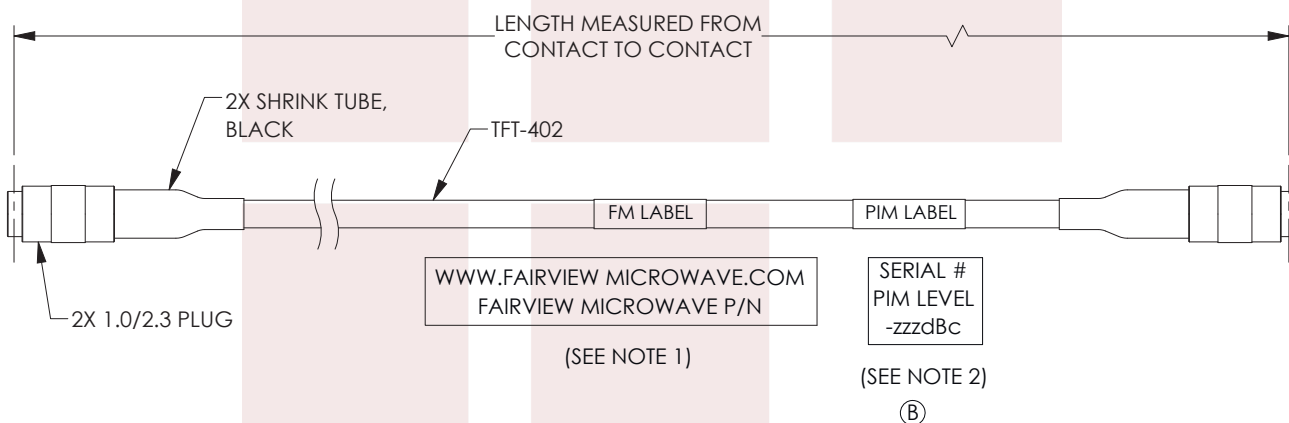
Click the following link to obtain additional part information: [Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 24 Inch Using Times Microwave Components FMCA2297-24](https://www.fairviewmicrowave.com/low-pim-1.0-2.3-plug-1.0-2.3-plug-cable-tft-402-coax-fmca2297-24-p.aspx)

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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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Low PIM 1.0/2.3 Plug to 1.0/2.3 Plug Cable TFT-402 Coax in 24 Inch Using Times Microwave Components		CABLE LENGTH (L) TOLERANCES:		SHEET 1 OF 1	
SIZE A		CAGE CODE 3FKR5		SCALE N/A	
DRAWN BY DFRISIELLO		ITEM NO. FMCA2297		REV B	