

Low PIM 2.2-5 Female to N Female Bulkhead Cable TFT-402 Coax in 48 Inch Using Times Microwave Components

The 2.2-5 female to type N female bulkhead 48 inch cable using TFT-402 coax, part number FMCA2525-48, 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 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 FMCA2525-48 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]
DC Resistance Inner Conductor		8.5 [27.89]		$\Omega/1000\text{ft}$ [Ω/Km]
DC Resistance Outer Conductor		5.6 [18.37]		$\Omega/1000\text{ft}$ [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.)	0.36	0.48	0.64	0.96	1.41	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 $0.1 \times \sqrt{\text{FGHz}}$ dB for the 2.2-5 connector and 0.1 dB for the N connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.748 in [19 mm]



Configuration:

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

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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Cable

Cable Type	TFT-402
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	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:

FMCA2525 - xx uu

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

Example: FMCA2525-12 = 12 inches long cable
 FMCA2525-100cm = 100 cm long cable

Low PIM 2.2-5 Female to N Female Bulkhead Cable TFT-402 Coax in 48 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 2.2-5 Female to N Female Bulkhead Cable TFT-402 Coax in 48 Inch Using Times Microwave Components FMCA2525-48](https://www.fairviewmicrowave.com/low-pim-2.2-5-female-n-female-cable-tft-402-coax-fmca2525-48-p.aspx)

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