

Low PIM 4.1/9.5 Mini DIN Male to N Female Bulkhead Cable TFT-402-LF Coax Using Times Microwave Components

The 4.1/9.5 Mini DIN male to type N female bulkhead cable using TFT-402-LF coax, part number FMCA2477, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN to type N cable assembly has a male 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 FMCA2477 4.1/9.5 Mini DIN male to type N female cable assembly operates to 3 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		3	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	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.035	0.057	0.083	0.117	0.207	dB/ft
	0.11	0.19	0.27	0.38	0.68	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.866 in [22 mm]

Cable

Cable Type TFT-402-LF



Configuration:

- 4.1/9.5 Mini DIN Male
- N Female Bulkhead
- TFT-402-LF

Features:

- Max Frequency 3 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	4.1/9.5 Mini DIN Male	N Female
Mount Method		Bulkhead
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Silver	Brass, Silver
Contact Plating Spec.	5 μ m	5 μ m
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Tri-Metal
Outer Cond Plating Spec.		3 μ m
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	2 μ m	3 μ m
Coupling Nut Material & Plating	Brass, Nickel	
Coupling Nut Plating Spec.	5 μ m	
Torque	106 in-lbs 11.98 Nm	10 in-lbs 1.13 Nm

Environmental Specifications
Temperature

Operating Range -40 to +85 deg C

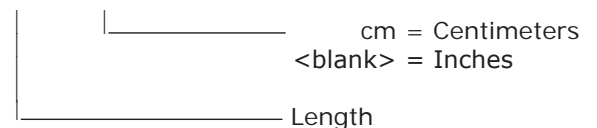
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA2477 - xx uu

 Example: FMCA2477-12 = 12 inches long cable
 FMCA2477-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Male 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.

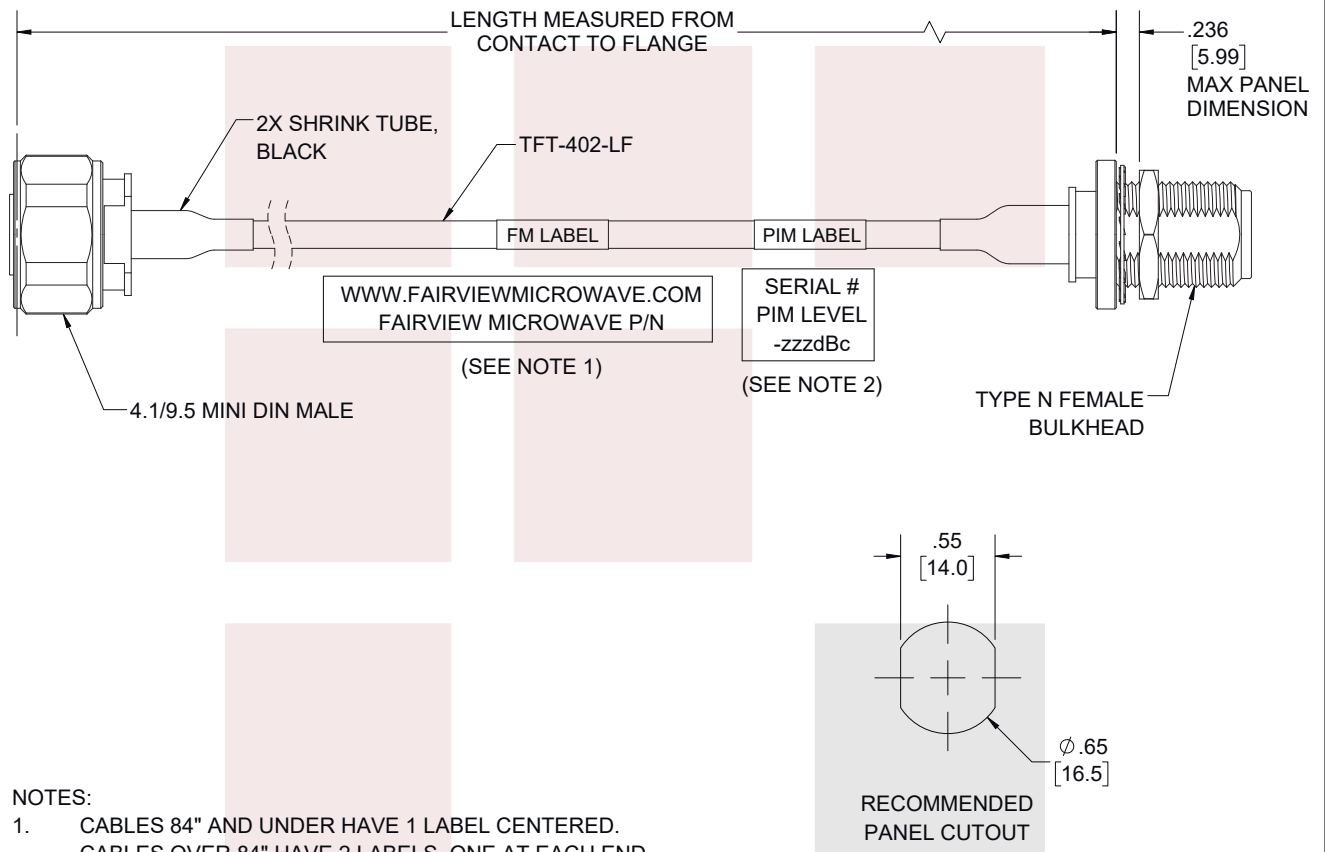
Click the following link to obtain additional part information: [Low PIM 4.1/9.5 Mini DIN Male to N Female Bulkhead Cable TFT-402-LF Coax Using Times Microwave Components FMCA2477](#)

URL: <https://www.fairviewmicrowave.com/low-pim-4.1-9.5-mini-din-male-n-female-cable-tft-402-lf-coax-fmca2477-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/30/21	SRAUTUS



- 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 LABEL 6" FROM CABLE END 1 PLACE.

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	<p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ± .02 [.51]</td> <td>FRACTIONS ± 1/32</td> <td>CABLE LENGTH (L) TOLERANCES:</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ± .02 [.51]</td> <td>ANGLES ± 1°</td> <td></td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ± .005 [.13]</td> <td></td> <td></td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table>		.X = ± .02 [.51]	FRACTIONS ± 1/32	CABLE LENGTH (L) TOLERANCES:	L ≤ 12 [305] = +1 [25] / -0	.XX = ± .02 [.51]	ANGLES ± 1°		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ± .005 [.13]			60 [1524] < L ≤ 120 [3048] = +4 [102] / -0				120 [3048] < L ≤ 300 [7620] = +6 [152] / -0				300 [7620] < L = +5%L / -0	<p>SHEET 1 OF 1</p>
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SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY	ITEM NO. FMCA2477	REV A																			

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