

## FMCA2378 DATA SHEET

# Low PIM 2.2-5 Female to N Female Bulkhead Cable 1/4 inch Superflexible Coax

The 2.2-5 female to type N female bulkhead cable using 1/4 inch superflexible coax, part number FMCA2378, 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 corrugated 1/4" superflexible coax. Fairview Microwave's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The FMCA2378 2.2-5 female to type N female cable assembly operates to 6 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.

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**

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Description	Min	Т	ур	Мах	U	Inits
Frequency Range	DC			6		GHz
VSWR				1.4:1		
Velocity of Propagation		8	32			%
RF Shielding	120					dB
Passive Intermodulation				-160		dBc
Capacitance		24.4 [	80.05		pF/fl	t [pF/m]
Inductance		0.059	[0.19]		uH/fl	t [uH/m]
DC Resistance Inner Cor	nductor	3.2	10.5]		Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	nductor	2.53	[8.3]		Ω/100	0ft [Ω/Km]
Jacket Spark				2,000	V	/rms

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)		0.02	0.03	0.05	0.1	dB/ft
	0.03	0.07	0.1	0.16	0.33	dB/m

**Electrical Specification Notes:** 

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2dB connector loss.

### **Mechanical Specifications**

Cable Assembly Diameter

0.86 in [21.84 mm]



## **Configuration:**

- 2.2-5 Female
- N Female Bulkhead
- 1/4" Superflexible

## **Features:**

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket
- Low PIM and Low Loss
- 100% Tested with PIM Test Results Marked on Cable

## **Applications:**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- PIM Testing

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

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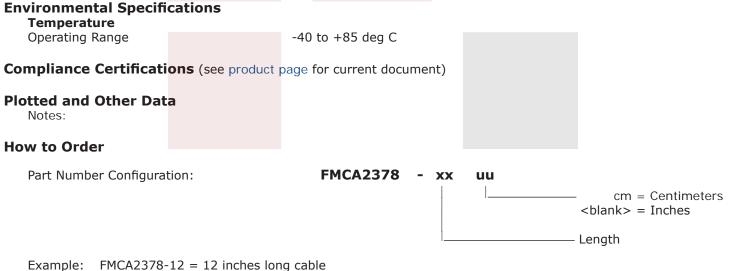
#### Cable

Cable Type Impedance
Inner Conductor Type
Inner Conductor Material and Plating
-
Dielectric Type
Number of Shields
Shield Layer 1
Jacket Material
Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Typical Flex Cycles Tensile Strength

#### Connectors

Description	Connector 1	Connector 2	
Туре	2.2-5 Female	N Female	
Mount Method		Bulkhead	
Impedance	50 Ohms	50 Ohms	
Contact Material & Plating	Bronze, Silver	Bronze, Silver	
Dielectric Type	PTFE	PTFE	
Outer Cond Material & Plati	ng Bronze, Silver	Brass, Tri-Metal	
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal	



1/4" Superflexible

Copper Clad Aluminum

0.303 in [7.7 mm]

0.5 in [12.7 mm]

79 lbs [35.83 Kg]

1 in [25.4 mm]

Helically Corrugated Copper Tube

50 Ohms Solid

PE, Black

PE (F) 1

20

FMCA2378-100cm = 100 cm long cable

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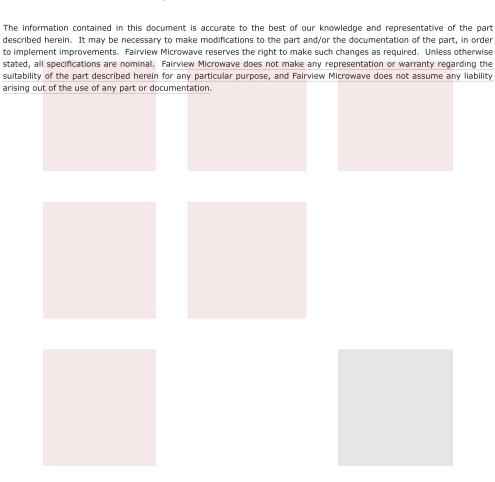




Low PIM 2.2-5 Female to N Female Bulkhead Cable 1/4 inch Superflexible Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low PIM 2.2-5 Female to N Female Bulkhead Cable 1/4 inch Superflexible Coax FMCA2378

URL: https://www.fairviewmicrowave.com/low-pim-2.2-5-female-n-female-cable-fm-1-4-sfhc-coax-fmca2378-p.aspx

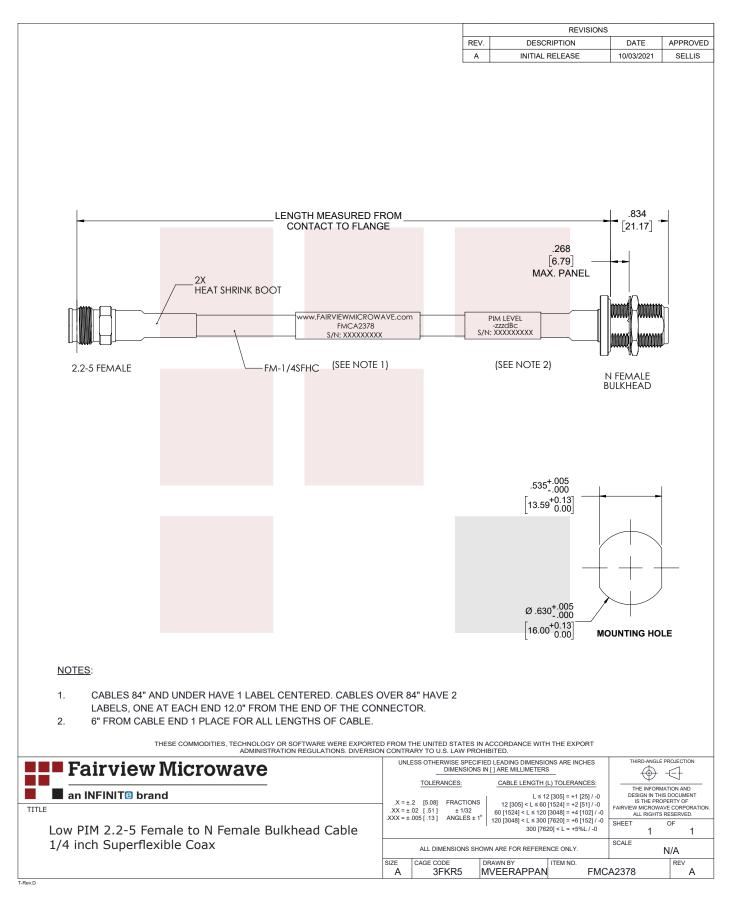


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