

# FMCA1011 DATA SHEET

# N Female Bulkhead to UMCX 2.5 Plug Cable RG178 Coax with LF Solder

The type N female bulkhead to UMCX 2.5 plug cable using RG178 coax, part number FMCA1011, from Fairview Microwave is in-stock and ships same day. This Fairview type N to UMCX 2.5 cable assembly has a female to plug gender configuration with 50 ohm flexible RG178 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1011 type N female to UMCX 2.5 plug 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. Fairview Microwave's UMCX 2.5 (also known as 2.5mm UMCX) ultra-miniature cable assemblies have a mated connection height of 2.5mm. They are constructed using a flexible microcoax cable and are comparable in design to Hirose U.FL®, IPEX MHF® as well as other UMCX connector and cable manufactures, Fairview's other UMCX 2.1, WMCX 1.6 and HMCX32 1.2 connectors are also available for use on our 0.81mm in-series micro-coax jumpers. These UMCX 2.5 are available in the following coax types; 0.81mm, 1.13mm, RG178 and RG178-DS.

Fairview's UMCX 2.5 cables can be ordered in between-series configurations with Female Bulkhead versions of SMA, Reverse Polarity SMA and Type N connectors as well as an SMA Male option. With frequencies up to 6 GHz, these UMCX cables are perfectly suited for wireless communications such as Wi-Fi, Bluetooth, GPS, ZigBee and LTE. These cables offer a small form factor, flexible coax and provide a low profile RF connection perfect for board-to-board connectivity. Fairview's UMCX 2.5 cable assemblies are available from stock in standard lengths and will ship same-day they are ordered. Custom lengths are also available upon request with slightly longer lead times.

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	Тур	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.35:1	
Operating Voltage (DC)			300	Vdc

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Typ.)	0.44	0.54	0.74	0.95	1.08	dB/ft
	1.44	1.77	2.43	3.12	3.54	dB/m
VSWR (Max.)	1.35:1	1.35:1	1.35:1	1.35:1	1.35:1	
Return Loss (Max.)	16.54	16.54	16.54	16.54	16.54	dB



## **Configuration:**

- N Female Bulkhead
- UMCX 2.5 Plug
- RG178

#### **Features:**

- Max Frequency 3 GHz
- FEP Jacket
- 2.5mm mated assembly height
- operate from DC to 6 GHz
- 100% RF and Continuity tested
- Compatible with Hirose U.FL® and IPEX MHF® products
- Available in 0.81mm, 1.13mm, 1.37mm, RG178 and RG178-DS shielded coax
- Small foot print with easy snap on/off mating

### **Applications:**

- General Purpose
- Laboratory Use
- Wireless LAN, Mini PCI
- Mobile Antenna/GPS/Radio Systems
- PDA/PCS/Cellular Handset applications
- Wireless Communications systems (LAN,GSM,PCS,WCDMA, UMTS)

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#### **Mechanical Specifications**

**Cable Assembly** 

Length\* 0 in [0 mm]

Cable

Cable Type RG178
Impedance 50 Ohms
Inner Conductor Type Stranded
Inner Conductor Material and Plating Copper, Silver
Dielectric Type FEP

Dielectric Type Ff Number of Shields 1

Shield Layer 1 Tinned Copper Outer Conductor Material and Plating Tinned Copper

Jacket Material FEP

Jacket Diameter 0.07 in [1.78 mm]

#### **Connectors**

Description	Connector 1	Connector 2				
Туре	N Female	UMCX 2.5 Plug				
Mount Method	Bulkhead					
Impedance	50 Ohms	50 Ohms				
Contact Material & Plating	Phosphor Bronze, G	old				
Body Material & Plating	Brass, Nickel					

#### **Environmental Specifications**

**Temperature** 

Operating Range -55 to +125 deg C

**Compliance Certifications** (see product page for current document)

Plotted and Other Data

Notes:

**How to Order** 

Part Number Configuration: FMCA1011 - xx uu

cm = Centimeters <blank> = Inches

———— Length

Example: FMCA1011-12 = 12 inches long cable

FMCA1011-100cm = 100 cm long cable





N Female Bulkhead to UMCX 2.5 Plug Cable RG178 Coax with LF Solder 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: N Female Bulkhead to UMCX 2.5 Plug Cable RG178 Coax with LF Solder FMCA1011

The information contained in this document is accurate to the best of our knowledge and representative of the part

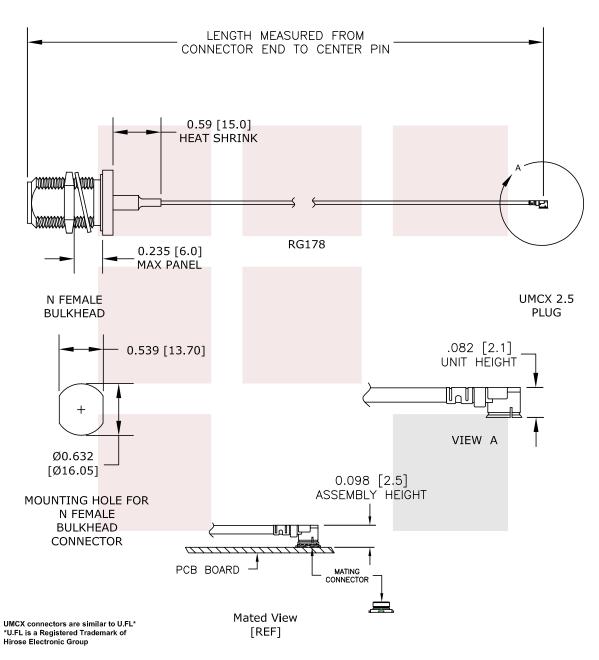
URL: https://www.fairviewmicrowave.com/n-female-umcx-2.5-plug-cable-rg178-coax-fmca1011-p.aspx

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N Female Bulkhead to UMCX 2.5 Plug Cable RG178	DWG NO FMCA1011			CAGE CODE 3FKR5			
Coax with LF Solder	CAD FILE 031215	SHEET	SCALE	N/A	SIZE A	150	