

# FMCA1001-3 DATA SHEET

# SMA Female Bulkhead to UMCX 2.5 Plug Cable 1.13mm Coax in 3 Inch with LF Solder

The SMA female bulkhead to UMCX 2.5 plug 3 inch cable using 1.13mm coax, part number FMCA1001-3, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to UMCX 2.5 cable assembly has a female to plug gender configuration with 50 ohm flexible 1.13mm coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1001-3 SMA female to UMCX 2.5 plug cable assembly operates to 6 GHz. Our RF cable assembly with SMA 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 micro-coax 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		Max	Units	
Frequency Range	DC		6	GHz	
VSWR			1.5:1		
Operating Voltage (DC)			300	Vdc	

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.) VSWR (Max.)	0.5 1.35:1	0.7 1.35:1	0.97 1.35:1	1.44 1.35:1	1.98 1.5:1	dB
Return Loss (Max.)	16.54	16.54	16.54	16.54	13.98	dB



## **Configuration:**

- SMA Female Bulkhead
- UMCX 2.5 Plug
- 1.13mm

#### Features:

- Max Frequency 6 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)

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





### **Mechanical Specifications**

**Cable Assembly** 

Length\* 3 in [76.2 mm] Weight 0.01 lbs [4.54 g]

Cable

Cable Type 1.13mm Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper, Silver

Dielectric Type FEP Number of Shields 1

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

Jacket Material

**FEP** Jacket Diameter 0.044 in [1.12 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Female	UMCX 2.5 Plug
Mount Method	Bulkhead	
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, G	old
Body Material & Plating	Brass, Gold	

#### **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** 

FMCA1001 - xx Part Number Configuration: uu cm = Centimeters <black> = Inches

Example: FMCA1001-12 = 12 inches long cable

FMCA1001-100cm = 100 cm long cable

Length





SMA Female Bulkhead to UMCX 2.5 Plug Cable 1.13mm Coax in 3 Inch 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: SMA Female Bulkhead to UMCX 2.5 Plug Cable 1.13mm Coax in 3 Inch with LF Solder FMCA1001-3

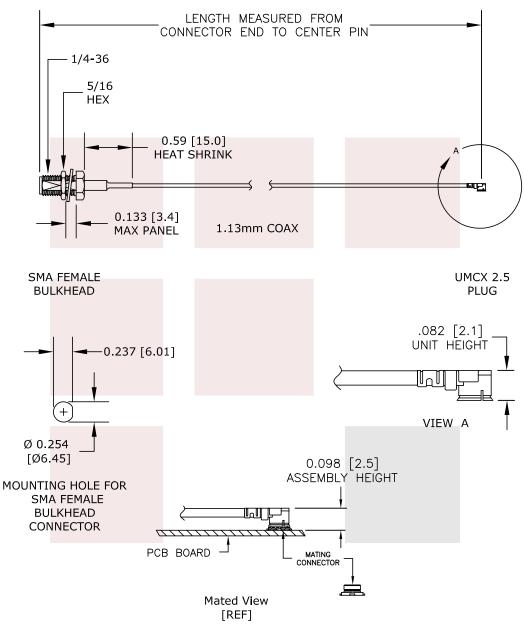
URL: https://www.fairviewmicrowave.com/sma-female-umcx-2.5-plug-cable-1.13mm-coax-fmca1001-3-p.aspx



301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689







UMCX connectors are similar to U.FL\* \*U.FL is a Registered Trademark of Hirose Electronic Group

FAIRVIEW MICROWAVE INC.  ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].					
SMA Female Bulkhead to UMCX 2.5 Plug Cable 1.13mm Coax in 3 Inch with LF Solder	FMCA1001			CAGE CODE 3FKR5		
	CAD FILE 031215	SHEET	SCALE	N/A	SIZE A	150