Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

FMCA1005
DATA SHEET

SMA Female Bulkhead to UMCX 2.1 Plug Cable 0.81mm Coax and RoHS Compliant

Fairview Microwave's UMCX 2.1 (also known as 2.1mm UMCX) ultra-miniature cable assemblies have a mated connection height of 2.1mm. 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.

Fairview's UMCX 2.1 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 2.1 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.

Configuration:

- SMA Female Bulkhead
- UMCX 2.1 Plug
- 0.81mm

Features:

- 2.1mm mated assembly height
- operate from DC to 6 GHz
- 100% RF and Continuity tested
- Compatible with Hirose U.FL® and IPEX MHF® products
- Small foot print with easy snap on/off mating

Applications:

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

Electrical Specifications

Frequency Range	DC to 6 GHz
Impedance	50 Ohms
Max VSWR	1.5:1

Performance by Frequency

Description	F1	F2	F3	F4	F5
Frequency	250 MHz	500 MHz	1000 MHz	2.5 GHz	6 GHz
VSWR	1.35:1	1.35:1	1.35:1	1.35:1	1.5:1
Return Loss (dB)	16.54	16.54	16.54	16.54	13.98
Insertion Loss (dB/ft)	0.55	0.78	1.25	1.9	2.89
(dB/m)	1.8	2.56	4.1	6.23	9.48

Mechanical Specifications

Temperature

Temperature Operating Range	-55 to +125 deg C

Cable

Description	Cable
Cable Type	0.81mm
Inner Conductor Type	Stranded
Cable Inner Conductor	Copper, Silver
No of Shields	1
Cable Outer Conductor 1	Tinned Copper
Dielectric Type	FEP
Jacket Material	FEP
Jacket Diameter	0.032 in [0.81 mm]

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	UMCX 2.1 Plug
Configuration	Straight	Straight
Mount Method	Bulkhead	
Inner Conductor Material & Plating	Beryllium Copper, Gold	
Body Material & Plating	Brass, Gold	

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
REACH Compliant 12/19/2011
Notes:
- Values at +25 °C, sea level

How to Order

Part Number Configuration: **FMCA1005 - xx uu**

- xx = Length
- uu = cm = Centimeters, <blank> = Inches

Example: FMCA1005-12 = 12 inches long cable
FMCA1005-100cm = 100 cm long cable

SMA Female Bulkhead to UMCX 2.1 Plug Cable 0.81mm Coax and RoHS Compliant from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic 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 2.1 Plug Cable 0.81mm Coax and RoHS Compliant FMCA1005

URL: http://www.fairviewmicrowave.com/sma-female-umcx-2.1-plug-cable-0.81mm-coax-fmca1005-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.

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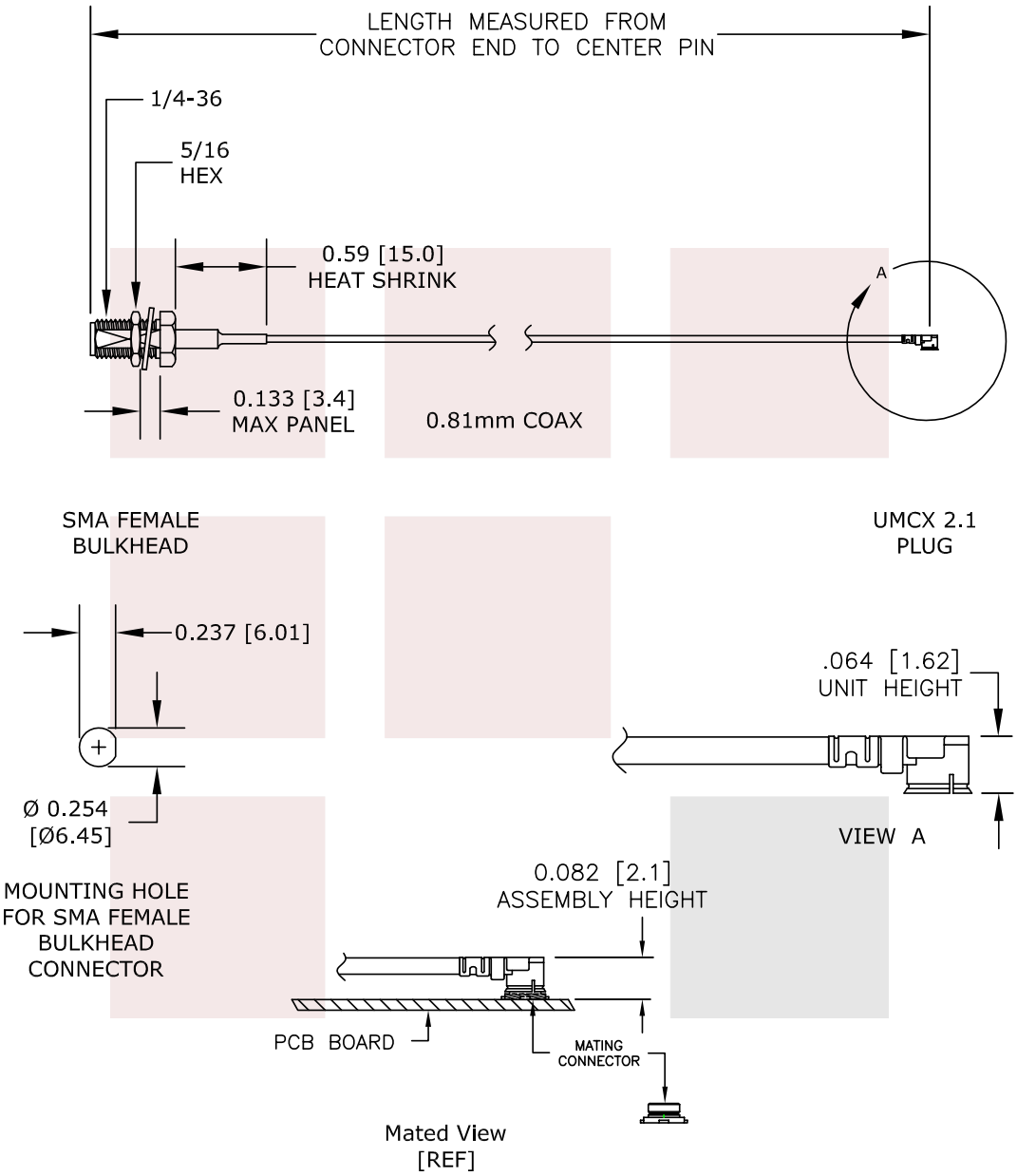

UMCX connectors are similar to U.FL*
*U.FL is a Registered Trademark of
Hirose Electronic Group

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].
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