

UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178-DS
Coax and RoHS Compliant

Fairview Microwave's UMCX 2.5 (also known as 2.5mm UMCX) ultra-miniature cable assemblies have a mate connection height of 2.5mm. They are constructed using flexible micro-coax cable and are comparable in design to Hirose U.FL®, IPEX MHF® as well other UMCX connector and cable manufactures. Fairview's other UMCX 2.1, WMCX 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, 1.37mm, RG178 and RG178-DS.

With operational 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.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.55:1	
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.)	0.14 [0.46]	0.24 [0.79]	0.44 [1.44]	0.65 [2.13]	1.56 [5.12]	dB/ft [dB/m]
VSWR (Max.)	1.4:1	1.4:1	1.4:1	1.4:1	1.55:1	
Return Loss (Max.)	15.56	15.56	15.56	15.56	13.32	dB

Mechanical Specifications

Cable Assembly

Cable

Cable Type	RG178-DS
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	FEP
Number of Shields	2
Shield Layer 1	Tinned Copper
Shield Layer 2	Tinned Copper
Jacket Material	FEP
Jacket Diameter	0.086 in [2.18 mm]



Configuration:

- UMCX 2.5 Plug
- UMCX 2.5 Plug
- RG178-DS

Features:

- 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
- 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)

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Connectors

Description	Connector 1	Connector 2
Type	UMCX 2.5 Plug	UMCX 2.5 Plug
Polarity	Standard	Standard
Impedance	50 Ohms	50 Ohms

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:

FMCA1055 - xx uu

cm = Centimeters
 <blank> = Inches

Length

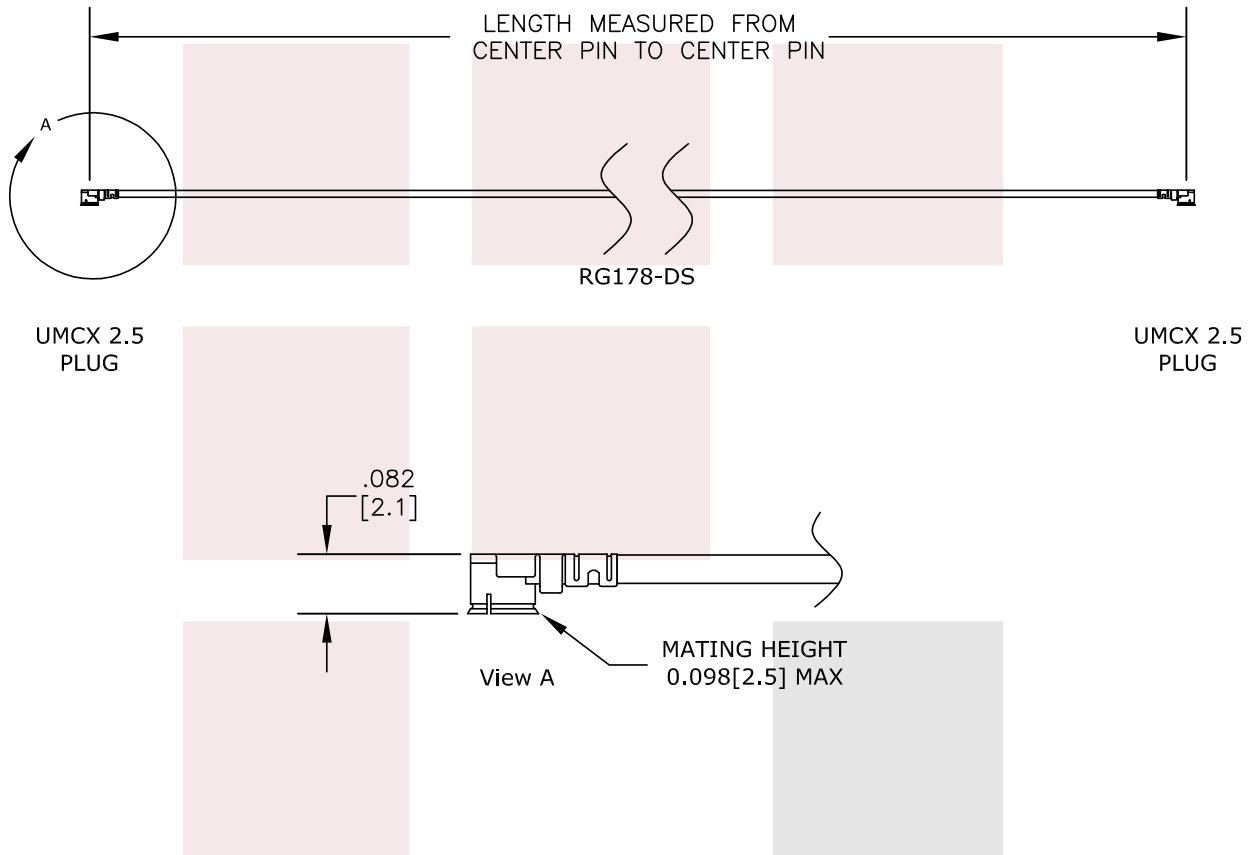
Example: FMCA1055-12 = 12 inches long cable
 FMCA1055-100cm = 100 cm long cable

UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178-DS 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: [UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178-DS Coax and RoHS Compliant FMCA1055](#)

URL: <https://www.fairviewmicrowave.com/umcx-2.5-plug-umcx-2.5-plug-cable-rg178-ds-coax-fmca1055-p.aspx>

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

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TITLE UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178-DS Coax and RoHS Compliant		DWG NO FMCA1055		CAGE CODE 3FKR5	
CAD FILE	120814	SHEET	SCALE	N/A	SIZE A 150