

UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178 Coax

The UMCX 2.5 plug to UMCX 2.5 plug cable using RG178 coax, part number FMCA1054, from Fairview Microwave is in-stock and ships same day. This Fairview UMCX 2.5 to UMCX 2.5 cable assembly has a plug to plug gender configuration with 50 ohm flexible RG-178 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1054 UMCX 2.5 plug to UMCX 2.5 plug cable assembly operates to 6 GHz. 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.

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 | 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 | 0.24 | 0.44 | 0.65 | 1.56 | dB/ft |
| | 0.46 | 0.79 | 1.44 | 2.13 | 5.12 | 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

Length* 0 in [0 mm]

Cable

Cable Type RG-178



Configuration:

- UMCX 2.5 Plug
- UMCX 2.5 Plug
- RG-178

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
- 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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| | |
|--------------------------------------|-------------------|
| 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 | 0.07 in [1.78 mm] |

Connectors

| Description | Connector 1 | Connector 2 |
|-------------|---------------|---------------|
| Type | UMCX 2.5 Plug | UMCX 2.5 Plug |
| 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:

FMCA1054 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

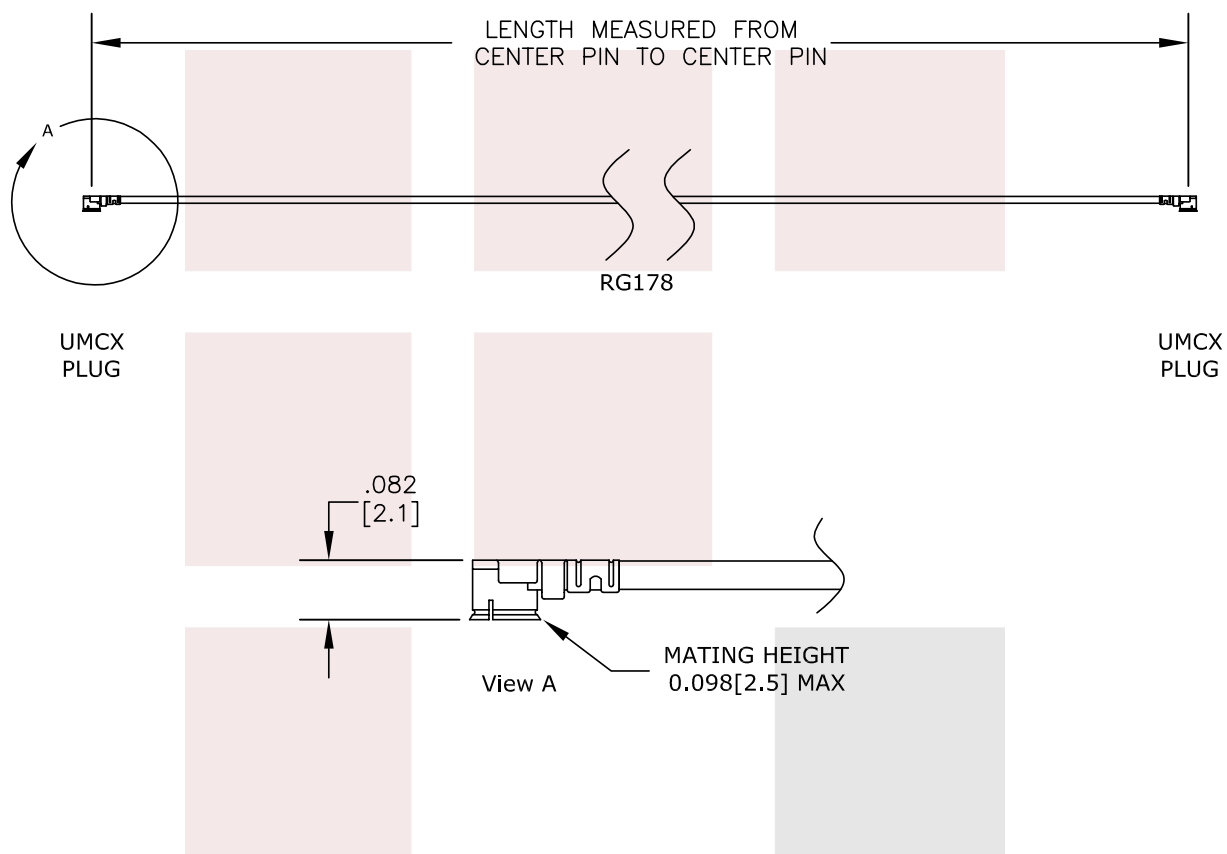
Example: FMCA1054-12 = 12 inches long cable
 FMCA1054-100cm = 100 cm long cable

UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178 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: [UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178 Coax FMCA1054](#)

URL: <https://www.fairviewmicrowave.com/umcx-2.5-plug-umcx-2.5-plug-cable-rg178-coax-fmca1054-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.



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

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|---|--|---|-------|--------------------|------------|
| 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]. | | | |
| TITLE UMCX 2.5 Plug to UMCX 2.5 Plug Cable RG178 Coax | | DWG NO FMCA1054 | | CAGE CODE 3FKR5 | |
| | | CAD FILE 120814 | SHEET | SCALE N/A | SIZE A 150 |