UMCX 2.5 Plug to UMCX 2.5 Plug Cable 9 Inch Length Using RG178-DS Coax, RoHS

TECHNICAL DATA SHEET	PE3CA1055-9

Pasternack's UMCX 2.5 series ultra-miniature coaxial cable assemblies (also called 2.5mm UMCX) have a mated connection height of only 2.5mm. They are constructed using a flexible micro-coax cable and are compatible with products such as Hirose U.FL, IPEX MHF and other UMCX connector and cable manufactures. Our UMCX 2.5 plug connectors are comparable in design to the Hirose U.FL connectors and the IPEX MHF series connectors. Pasternack also provided three additional connector options for our in-series 0.81mm micro-coax jumper cables including UMCX 2.1, WMCX 1.6 and HMCX32 1.2 connectors. UMCX 2.5 are available in the following coax types; 0.81mm, 1.13mm, 1.37mm, RG178 and RG178-DS.

These small form factor, flexible micro-coax jumper cables provide a low profile RF connection perfect for board-to-board connectivity such as mini-PCI circuit boards. With performance up to 6 GHz, these UMCX jumper cables are ideal for wireless applications including Wi-Fi, Bluetooth, GPS, ZigBee, LTE and many others. Our UMCX 2.5 cable assemblies are available from stock in standard lengths, and custom lengths are available upon request. Standard length UMCX 2.5 cables ship same day they are ordered.

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)

Configuration
Connector 1	UMCX 2.5 Plug
Connector 2	UMCX 2.5 Plug
Cable Type	RG178-DS

Electrical Specifications
Frequency Range	DC to 6 GHz
Impedance	50 Ohms
Max VSWR	1.55:1

Performance by Frequency

Frequency 1
Frequency	250 MHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.14 dB

Frequency 2
Frequency	500 MHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.24 dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: UMCX 2.5 Plug to UMCX 2.5 Plug Cable 9 Inch Length Using RG178-DS Coax, RoHS PE3CA1055-9

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Frequency 3
Frequency	1000 MHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.44 dB

Frequency 4
Frequency	2.5 GHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.65 dB

Frequency 5
Frequency	6 GHz
VSWR	1.55:1
Return Loss	13.32 dB
Insertion Loss	1.56 dB

Mechanical Specifications

Temperature
Temperature Operating Range	-55 to +125 deg C

Size
Length	9 in [228.6 mm]

Cable
Cable Type	RG178-DS
Inner Conductor Type	Stranded
Cable Inner Conductor	Copper, Silver
No of Shields	1
Cable Outer Conductor	Tinned Copper
Dielectric Type	FEP
Jacket Material	FEP
Jacket Diameter	0.086 in [2.18 mm]

Connector 1
Type	UMCX 2.5 Plug
Configuration	Straight

Connector 2
Type	UMCX 2.5 Plug
Configuration	Straight

Compliance Certifications (visit www.Pasternack.com for current document)
RoHS Compliant	Yes

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PE3CA1055-9

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TECHNICAL DATA SHEET   PE3CA1055-9

Plotted and Other Data

Notes:
• Values at +25 °C, sea level

How to Order

Part Number Configuration: **PE3CA1055   - xx   uu**

```
                                           Unit of Measure:
                                              cm = Centimeters
                                              <blank> = Inches
                                           Length
                                           Base Number
```

Example: PE3CA1055-12 = 12 inches long cable
             PE3CA1055-100cm = 100 cm long cable

UMCX 2.5 Plug to UMCX 2.5 Plug Cable 9 Inch Length Using RG178-DS Coax, RoHS from Pasternack Enterprises 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.
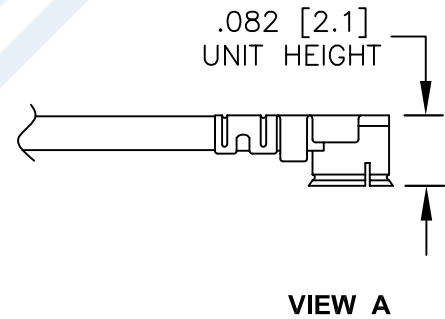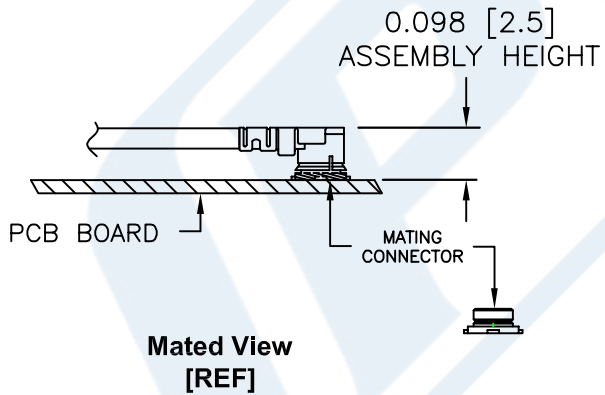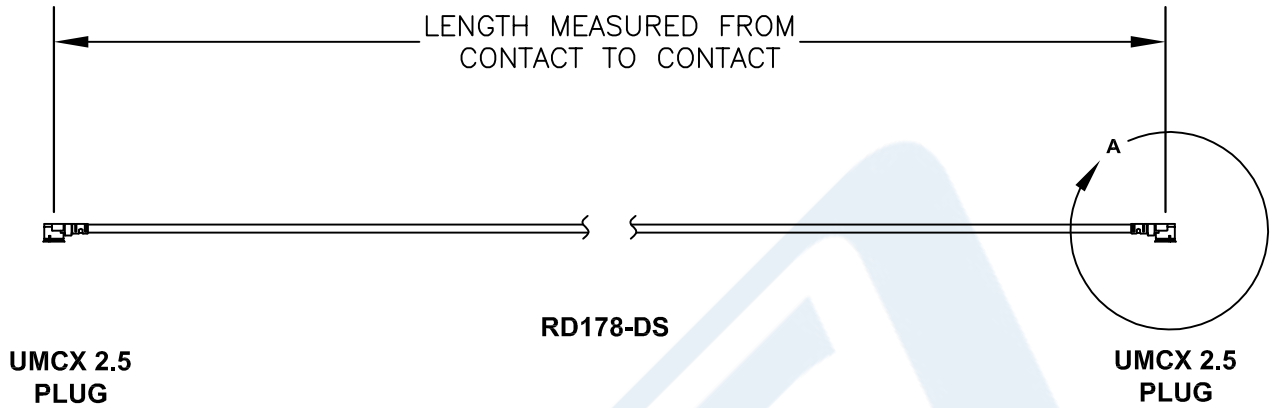
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: UMCX 2.5 Plug to UMCX 2.5 Plug Cable 9 Inch Length Using RG178-DS Coax, RoHS PE3CA1055-9

URL: http://www.pasternack.com/umcx-2.5-plug-umcx-2.5-plug-rg178-ds-cable-assembly-pe3ca1055-9-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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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PE3CA1055-9 CAD Drawing

UMCX 2.5 Plug to UMCX 2.5 Plug Cable 9 Inch Length Using RG178-DS Coax, RoHS

LENGTH MEASURED FROM
CONTACT TO CONTACT

A

RD178-DS

UMCX 2.5
PLUG

UMCX 2.5
PLUG

0.098 [2.5]
ASSEMBLY HEIGHT

.082 [2.1]
UNIT HEIGHT

PCB BOARD

MATING
CONNECTOR

**Mated View
[REF]**

VIEW A

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

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THE ENGINEER'S RF SOURCE

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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].
4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.

DWG TITLE		FSCM NO. 53919		
PE3CA1055				
CAD FILE	011515	SCALE N/A	SIZE A	200