

# SMA Female Bulkhead to UMCX 2.5 Plug Cable 12 Inch Length Using 0.81mm Coax, RoHS



# TECHNICAL DATA SHEET

# PE3CA1000-12

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 ultra-miniature products from companies such as Hirose, IPEX, and other UMCX connector and cable manufactures. Our UMCX 2.5 plug connectors are comparable in design to the Hirose U.FL series of connectors and the IPEX MHF series connectors. Pasternack also provides three additional connector options for our between-series 0.81mm micro-coax jumper cables including UMCX 2.5, WMCX 1.6 and HMCX32 1.2 low profile connectors with differing form factors and mated heights.

Our UMCX 2.5 between series cables can be ordered with Female Bulkhead versions of SMA, Reverse Polarity SMA and Type N connectors as well as an SMA Male option. These cables provide a convenient connector interface for applications that require and RF signal to be routed to an external RF component such as an antenna or to provide a test point for the RF printed circuit board. Other coax cable options include 1.13mm, 1.37mm, RG178, and RG178-DS (double shielded). These U.FL and MHF compatible 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 the same day they are ordered.

#### **Features**

- 1.2mm, 1.6mm, 2.1mm and 2.5mm mated assembly height's
- Operate from DC to 6GHz
- 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**

- 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 Connector 2 Cable Type SMA Female Bulkhead UMCX 2.5 Plug 0.81mm

### **Electrical Specifications**

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

#### Performance by Frequency

#### Frequency 1

 Frequency
 250 MHz

 VSWR
 1.35:1

 Return Loss
 16.54 dB

 Insertion Loss
 0.55 dB

## Frequency 2

Frequency 500 MHz VSWR 1.35:1

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female Bulkhead to UMCX 2.5 Plug Cable 12 Inch Length Using 0.81mm Coax, RoHS PE3CA1000-12

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com





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Return Loss	16.54 dB
Insertion Loss	0.78 dB

### Frequency 3

Frequency 1000 MHz VSWR 1.35:1 Return Loss 16.54 dB Insertion Loss 1.25 dB

#### Frequency 4

 Frequency
 2.5 GHz

 VSWR
 1.35:1

 Return Loss
 16.54 dB

 Insertion Loss
 1.9 dB

#### Frequency 5

 Frequency
 6 GHz

 VSWR
 1.5:1

 Return Loss
 13.98 dB

 Insertion Loss
 2.89 dB

## **Mechanical Specifications**

#### **Temperature**

Temperature Operating Range -55 to +125 deg C

#### Size

Length 12 in [304.8 mm]

#### Cable

Cable Type0.81mmInner Conductor TypeStrandedCable Inner ConductorCopper, SilverNo of Shields1Cable Outer Conductor 1Tinned Copper

Dielectric Type FEP Jacket Material FEP

Jacket Diameter 0.032 in [0.81 mm]

#### **Connector 1**

Type SMA Female Bulkhead

Configuration Straight Mount Method Bulkhead

Inner Conductor Material and Plating Beryllium Copper, Gold

Body Material and Plating Brass, Gold

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Connector 2

Type UMCX 2.5 Plug Configuration Straight

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

RoHS Compliant Yes

REACH Compliant 12/19/2011

#### **Plotted and Other Data**

Notes:

Values at +25 °C, sea level

#### How to Order

Part Number Configuration:

PE3CA1000 - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
Length
Base Number

Example: PE3CA1000-12 = 12 inches long cable

PE3CA1000-100cm = 100 cm long cable

SMA Female Bulkhead to UMCX 2.5 Plug Cable 12 Inch Length Using 0.81mm 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.

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URL: http://www.pasternack.com/sma-female-umcx-2.5-plug-0.81mm-cable-assembly-pe3ca1000-12-p.aspx

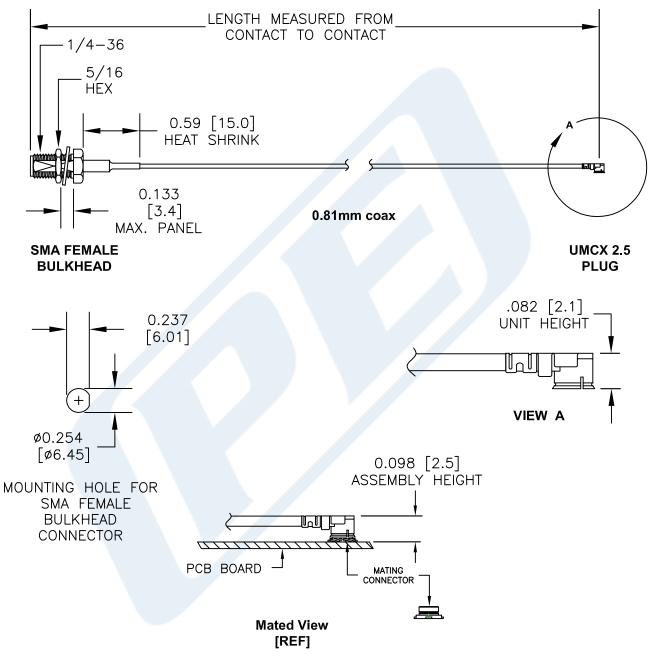
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# PE3CA1000-12 CAD Drawing

SMA Female Bulkhead to UMCX 2.5 Plug Cable 12 Inch Length Using 0.81mm Coax, RoHS



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

