WMCX 1.6 Plug to WMCX 1.6 Plug Cable
Using 0.81mm Coax, RoHS

TECHNICAL DATA SHEET	PE3CA1057

Pasternack's WMCX 1.6 series ultra-miniature coaxial cable assemblies (also called 1.6mm WMCX) have a mated connection height of only 1.6mm. They are constructed using a flexible micro-coax cable and are compatible with products such as Hirose W.FL and IPEX MHFIII. Our WMCX 1.6 plug connectors are comparable in design to the Hirose W.FL connectors and the IPEX MHFIII 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.

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 WMCX jumper cables are ideal for wireless applications including Wi-Fi, Bluetooth, GPS, ZigBee, LTE and many others. Our WMCX 1.6 cable assemblies are available from stock in standard lengths, and custom lengths are available upon request. Standard length WMCX 1.6 cables ship same day they are ordered.

Features
- 1.6mm mated assembly height
- Operate from DC to 6 GHz
- 100% RF and Continuity tested
- Compatible with Hirose W.FL and IPEX MHFIII 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	WMCX 1.6 Plug
Connector 2	WMCX 1.6 Plug
Cable Type	0.81mm

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	0.25 dB/ft [0.82 dB/m]

Frequency 2
Frequency	500 MHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.48 dB/ft [1.57 dB/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WMCX 1.6 Plug to WMCX 1.6 Plug Cable Using 0.81mm Coax, RoHS PE3CA1057

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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Frequency 3

Frequency	1000 MHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	0.95 dB/ft [3.12 dB/m]

Frequency 4

Frequency	2.5 GHz
VSWR	1.4:1
Return Loss	15.56 dB
Insertion Loss	1.6 dB/ft [5.25 dB/m]

Frequency 5

Frequency	6 GHz
VSWR	1.55:1
Return Loss	13.32 dB
Insertion Loss	2.59 dB/ft [8.5 dB/m]

Mechanical Specifications

Temperature

Temperature Operating Range	-55 to +125 deg C

Size

Cable

Cable Type	0.81mm
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	0.032 in [0.81 mm]

Connector 1

Type	WMCX 1.6 Plug
Configuration	Straight

Connector 2

Type	WMCX 1.6 Plug
Configuration	Straight

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

RoHS Compliant	Yes

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PE3CA1057 REV 1.1

WMCX 1.6 Plug to WMCX 1.6 Plug Cable
Using 0.81mm Coax, RoHS

TECHNICAL DATA SHEET	PE3CA1057

Plotted and Other Data

Notes:
- Values at +25 °C, sea level

How to Order

Part Number Configuration: **PE3CA1057   - xx   uu**

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

Example: PE3CA1057-12 = 12 inches long cable
PE3CA1057-100cm = 100 cm long cable

WMCX 1.6 Plug to WMCX 1.6 Plug Cable 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.
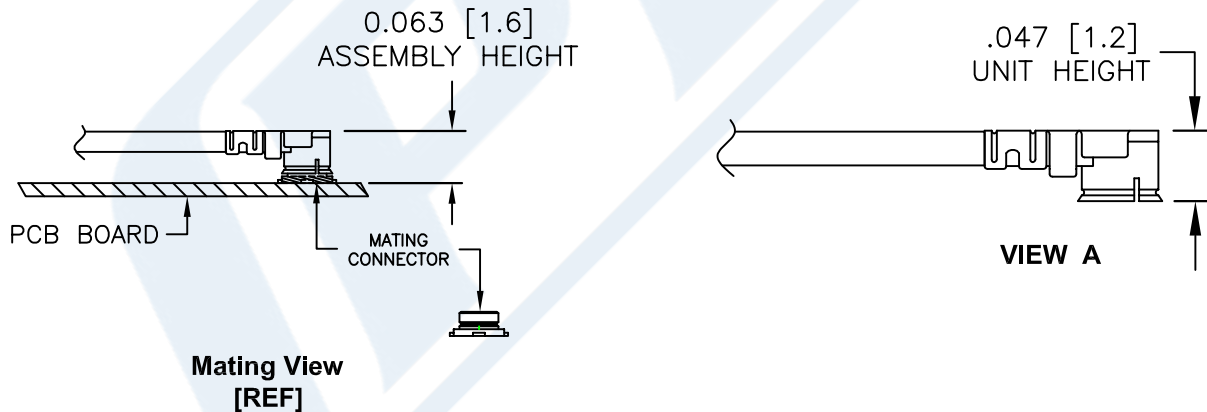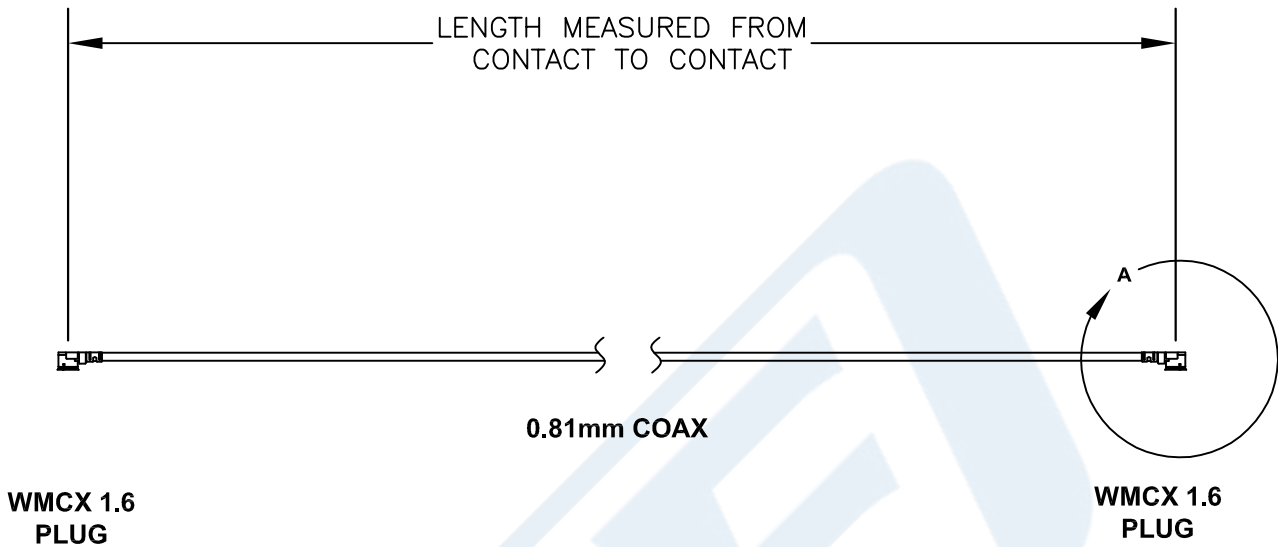
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URL: http://www.pasternack.com/wmcx-1.6-plug-wmcx-1.6-plug-0.81mm-cable-assembly-pe3ca1057-p.aspx

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PE3CA1057 CAD Drawing
WMCX 1.6 Plug to WMCX 1.6 Plug Cable Using 0.81mm Coax, RoHS

LENGTH MEASURED FROM
CONTACT TO CONTACT

A

0.81mm COAX

WMCX 1.6
PLUG

WMCX 1.6
PLUG

0.063 [1.6]
ASSEMBLY HEIGHT

.047 [1.2]
UNIT HEIGHT

PCB BOARD

MATING
CONNECTOR

VIEW A

**Mating View
[REF]**

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

PASTERNACK
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		
PE3CA1057				
CAD FILE	011515	SCALE N/A	SIZE A	200

PE3CA1057 REV 1.1