

N Female Bulkhead to UMCX 2.5 Plug Cable Using RG178 Coax, LF Solder

PE3CA1011

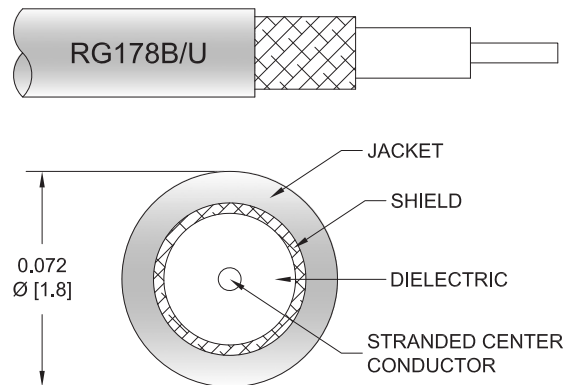


Configuration

- Connector 1: N Female Bulkhead
- Connector 2: UMCX 2.5 Plug
- Cable Type: RG178
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- FEP Jacket
- 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

- 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)

Description

Pasternack's PE3CA1011 type N female bulkhead to UMCX 2.5 plug cable using RG178 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack type N to UMCX 2.5 cable assembly has a female to plug gender configuration with 50 ohm flexible RG178 coax. The PE3CA1011 type N female to UMCX 2.5 plug cable assembly operates to 3 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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.

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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.35:1	
Operating Voltage (DC)			300	Vdc

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Typ.)	0.44	0.54	0.74	0.95	1.08	dB/ft
	1.44	1.77	2.43	3.12	3.54	dB/m
VSWR (Max.)	1.35:1	1.35:1	1.35:1	1.35:1	1.35:1	
Return Loss (Max.)	16.54	16.54	16.54	16.54	16.54	dB

Mechanical Specifications

Cable Assembly

Width/Diameter	0 in [0 mm]
Weight	0.084 lbs [38.1 g]

Cable

Cable Type	RG178
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 1 Material and Plating	Tinned Copper
Jacket Material	FEP
Jacket Diameter	0.07 in [1.78 mm]

Connectors

Description	Connector 1	Connector 2
Type	N Female Bulkhead	UMCX 2.5 Plug
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Gold	
Body Material and Plating	Brass, Nickel	

Environmental Specifications

Operating Range Temperature	-55 to +125 deg C
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PE3CA1011

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:
Values at 25°C, sea level.

Typical Performance Data

How to Order

Part Number Configuration:

PE3CA1011

- XX

uu

– Unit of Measure:

cm = Centimeters

<blank> = Inches

- Length

- Base Number

Example: PE3CA1011-12 = 12 inches long cable
PE3CA1011-100cm = 100 cm long cable

N Female Bulkhead to UMCX 2.5 Plug Cable Using RG178 Coax, LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

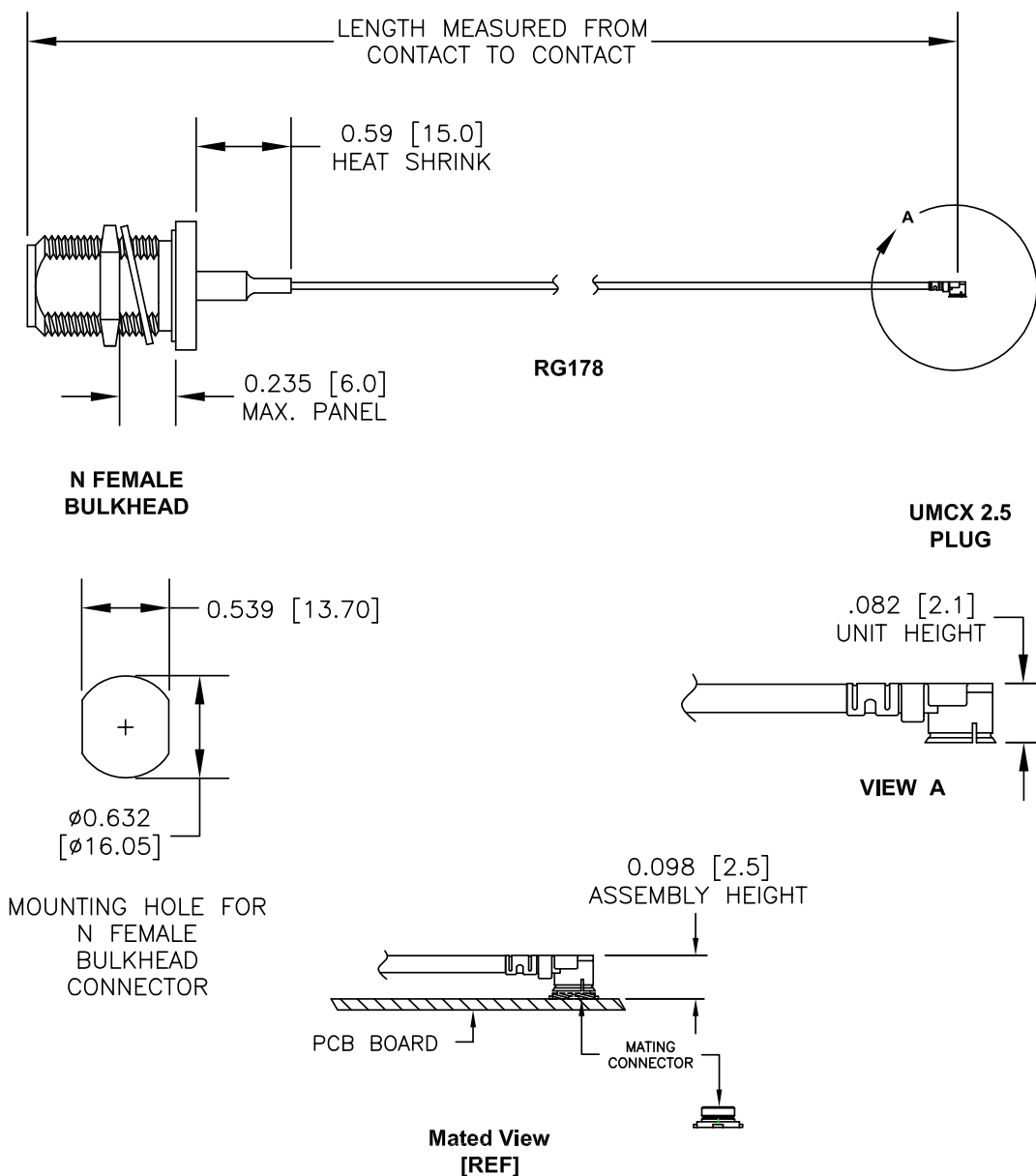
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Bulkhead to UMCX 2.5 Plug Cable Using RG178 Coax, LF Solder PE3CA1011](#)

URL: <https://www.pasternack.com/n-female-umcx-2.5-plug-rg178bu-cable-assembly-pe3ca1011-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3CA1011 CAD Drawing

N Female Bulkhead to UMCX 2.5 Plug Cable Using RG178 Coax, LF Solder



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



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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

PE3CA1011

FSCM NO. 53919

CAD FILE

031215

SCALE N/A

SIZE A

150