



Snap-On MMBX Plug Right Angle to SMA Male  
Right Angle Cable 4 Inch Length Using RG178 Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3C3998-4**

**Configuration**

- Connector 1: Snap-On MMBX Plug Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: RG178

**Features**

- Max. Operating Frequency of 3 GHz
- Snap-On mating

**Applications**

- General Purpose Test
- PCB Probing
- PCB Testing
- PCB-to-Panel

**Description**

Pasternack's MMBX cable assemblies are part of our full line of RF components available for same-day shipping. These MMBX cable assemblies are designed to connect MMBX system components or test connections, delivering signal frequencies as high as 3 GHz. Our family of MMBX cables can also be used to connect from PCB to panel, offering between series MMBX options with SMA Bulkhead, TNC Bulkhead and N Bulkhead assembly configurations. If none of our standard options fit your application, you can specify your own custom MMBX cable assembly using Pasternack's online Cable Creator.

Our MMBX cable assembly datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave cable assemblies allow designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right cable assemblies for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same day.

**Electrical Specifications**

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 3       | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Return Loss             |         | -15.563      |         | dB           |
| Insertion Loss          |         |              | 0.47    | dB           |
| Velocity of Propagation |         | 70           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Snap-On MMBX Plug Right Angle to SMA Male Right Angle Cable 4 Inch Length Using RG178 Coax PE3C3998-4](#)



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### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Max.) | 0.25 | 0.28 | 0.31 | 0.35 | 0.47 | dB    |

### Mechanical Specifications

#### Cable Assembly

Length\* 4 in [101.6 mm]  
Diameter 0.315 in [8 mm]

#### Cable

Cable Type RG178  
Impedance 50 Ohms  
Inner Conductor Type Stranded  
Inner Conductor Material and Plating Copper Clad Steel, Silver  
Dielectric Type PTFE  
Number of Shields 1  
Shield Layer 1 Silver Plated Copper Braid  
Jacket Material FEP, Tan  
Jacket Diameter 0.072 in [1.83 mm]  
  
Repeated Minimum Bend Radius 0.4 in [10.16 mm]

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### Connectors

| Description                          | Connector 1            | Connector 2          |
|--------------------------------------|------------------------|----------------------|
| Type                                 | MMBX Plug Right Angle  | SMA Male Right Angle |
| Specification                        |                        | MIL-STD-348A         |
| Impedance                            | 50 Ohms                | 50 Ohms              |
| Connection Method                    | Snap-On                |                      |
| Mating Cycles                        | 100                    |                      |
| Contact Material and Plating         | Beryllium Copper, Gold | Brass, Gold          |
| Contact Plating Specification        |                        | 50 µin minimum       |
| Dielectric Type                      | PTFE                   | PTFE                 |
| Outer Conductor Material and Plating | Brass, Gold            |                      |
| Body Material and Plating            | Brass, Gold            | Brass, Nickel        |
| Body Plating Specification           |                        | 100 µin minimum      |
| Coupling Nut Material and Plating    |                        | Brass, Nickel        |
| Coupling Nut Plating Specification   |                        | 100 µin minimum      |
| Hex Size                             |                        | 5/16 inch            |
| Torque                               |                        | 3 in-lbs [0.34 Nm]   |

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

### Environmental Specifications

#### Temperature

Operating Range

-55 to +155 deg C

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Snap-On MMBX Plug Right Angle to SMA Male Right Angle Cable 4 Inch Length Using RG178 Coax PE3C3998-4](#)



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## RF Cable Assemblies Technical Data Sheet

**PE3C3998-4**

### How to Order

Part Number Configuration:

**PE3C3998**

- **xx**

**uu**

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

Example: PE3C3998-12 = 12 inches long cable  
PE3C3998-100cm = 100 cm long cable

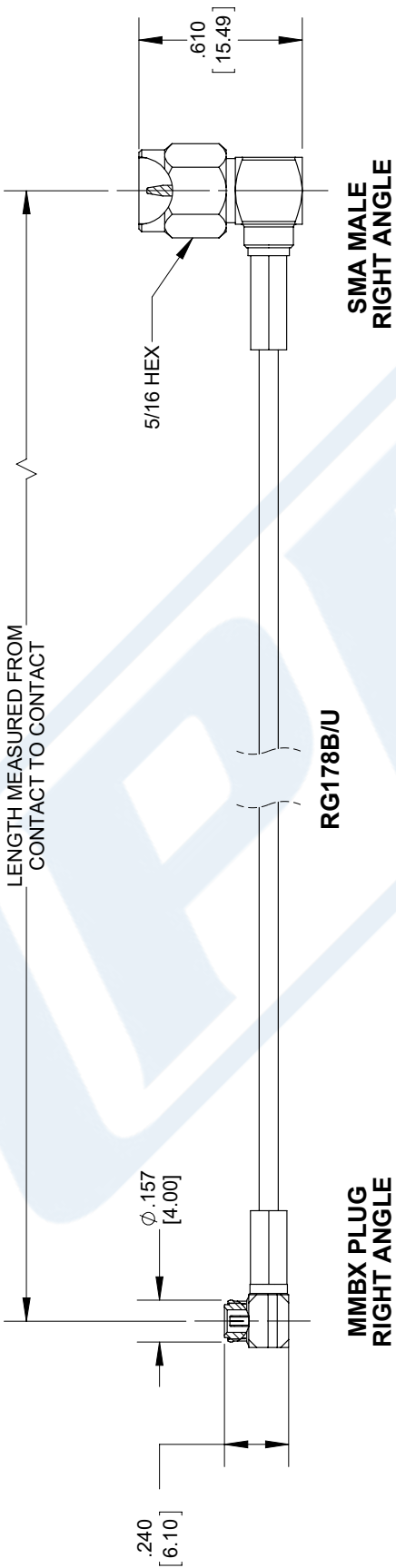
Snap-On MMBX Plug Right Angle to SMA Male Right Angle Cable 4 Inch Length Using RG178 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Snap-On MMBX Plug Right Angle to SMA Male Right Angle Cable 4 Inch Length Using RG178 Coax PE3C3998-4](https://www.pasternack.com/mmbx-plug-sma-male-rg178bu-cable-assembly-pe3c3998-4-p.aspx)

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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.

PE3C3998-4 CAD Drawing  
Snap-On MMBX Plug Right Angle to SMA Male Right Angle  
Cable 4 Inch Length Using RG178 Coax



STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE3C3998

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].