

RF Cable Assemblies Technical Data Sheet

Configuration

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

Features

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

Applications

- General Purpose TestPCB Probing
- PCB TestingPCB-to-Panel
- PCB-t0-P

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			1.77	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 to SMA Male Right Angle Cable 24 Inch Length Using RG178 Coax PE3C3997-24

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

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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.)	0.48	0.64	0.83	1.09	1.77	dB

Mechanical Specifications

Cable Assembly Length* Diameter

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Jacket Material Jacket Diameter

Repeated Minimum Bend Radius

24 in [609.6 mm] 0.315 in [8 mm]

RG178 50 Ohms Stranded Copper Clad Steel, Silver PTFE 1 Silver Plated Copper Braid FEP, Tan 0.072 in [1.83 mm]

0.4 in [10.16 mm]

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Connectors

Description	Connector 1	Connector 2 SMA Male Right Angle	
Туре	MMBX Plug		
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:

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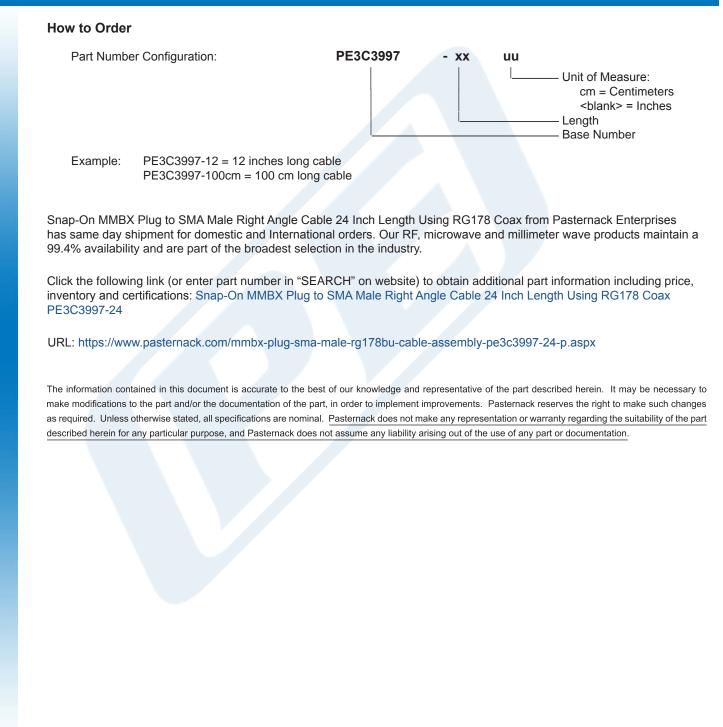
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PE3C3997-24 CAD Drawing Snap-On MMBX Plug to SMA Male Right Angle Cable 24 Inch Length Using RG178 Coax

