

Snap-On BMA Jack to SMB Plug Cable Using RG316 Coax



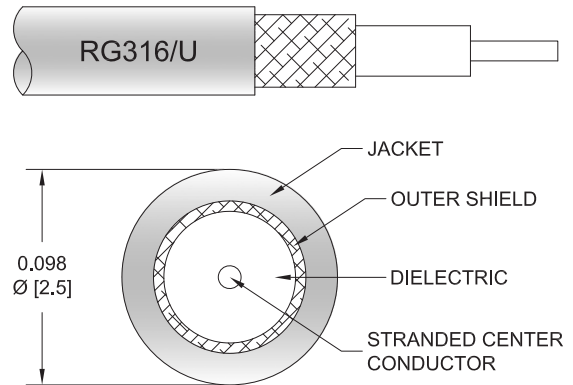
PE3W16831

Configuration

- Connector 1: Snap-On BMA Jack
- Connector 2: SMB Plug
- Cable Type: RG316
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W16831 BMA jack snap-on to SMB plug cable using RG316 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 BMA to SMB cable assembly has a jack to plug gender configuration with 50 ohm flexible RG316 coax. The PE3W16831 BMA jack to SMB plug cable assembly operates to 3 GHz.

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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W16831	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.24	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
PE3W16831-12	12 inch	Insertion Loss (Typ.)	0.35	0.4	0.48	0.62	0.82	dB	0.029
PE3W16831-24	24 inch	Insertion Loss (Typ.)	0.46	0.56	0.72	1	1.4	dB	0.04
PE3W16831-36	36 inch	Insertion Loss (Typ.)	0.57	0.72	0.96	1.38	1.98	dB	0.05
PE3W16831-48	48 inch	Insertion Loss (Typ.)	0.68	0.88	1.2	1.76	2.56	dB	0.06
PE3W16831-72	72 inch	Insertion Loss (Typ.)	0.9	1.2	1.67	2.52	3.72	dB	0.08

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.14 dB
Base Weight:	0.029 pounds
Additional Weight per Inch:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.029 lbs [13.15 g]

Cable

Cable Type	RG316
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	0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BMA Jack	SMB Plug
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method	Snap-On	
Mating Cycles	1,000	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	51.18µ in. minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Body Material and Plating	Passivated Stainless Steel	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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PE3W16831

Typical Performance Data

How to Order

Part Number Configuration:

PE3W16831

- xx

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W16831-12 = 12 inches long cable
PE3W16831-100cm = 100 cm long cable

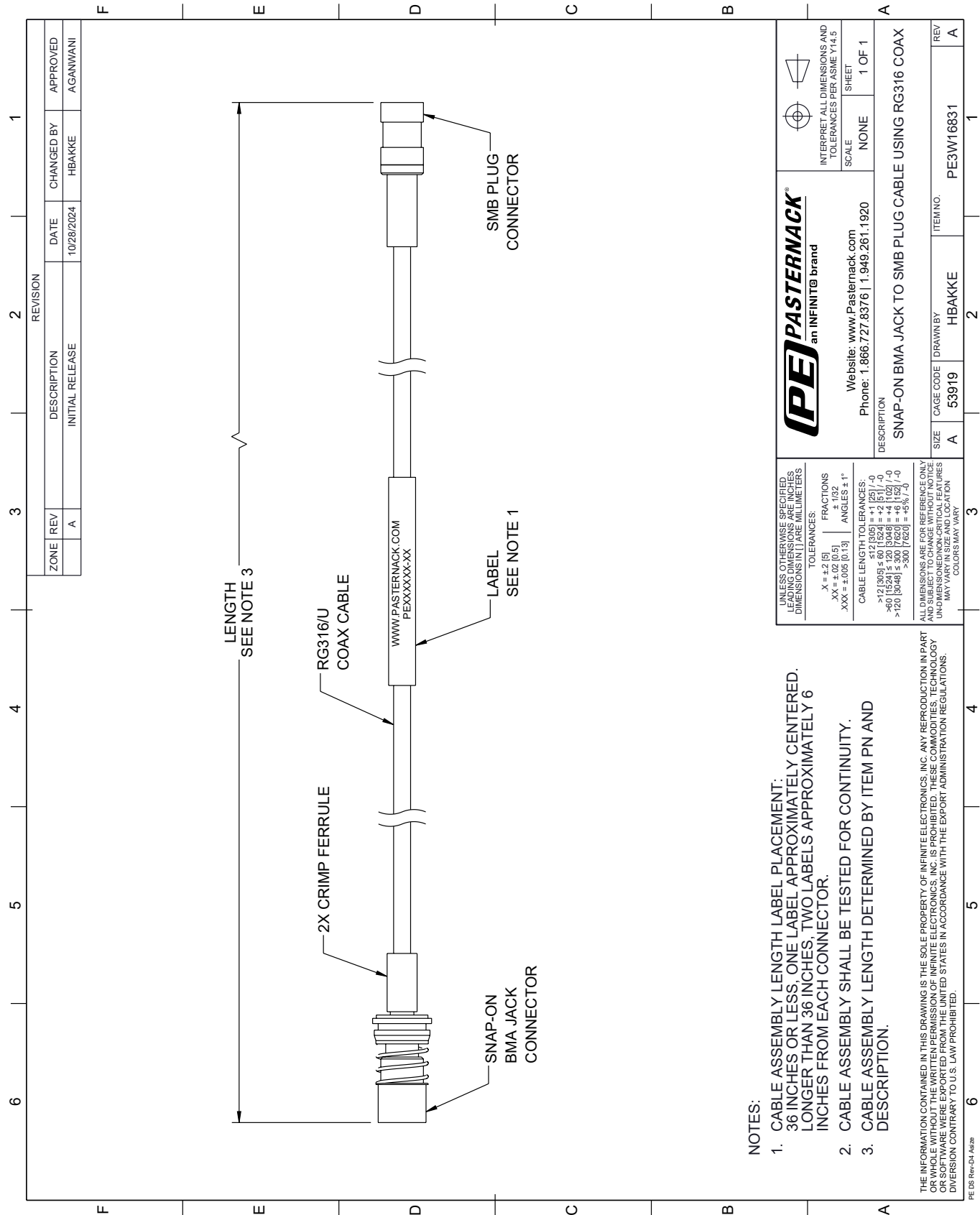
Snap-On BMA Jack to SMB Plug Cable Using RG316 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Snap-On BMA Jack to SMB Plug Cable Using RG316 Coax PE3W16831](#)

URL: <https://www.pasternack.com/snap-on-bma-jack-to-smb-plug-cable-using-rg316-pe3w16831-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.

PE3W16831 CAD Drawing
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NOTES:

- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- 2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		PE PASTERNAK® an INFINITE® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5			
TOLERANCES:		Website: www.Pasternack.com		SCALE			
X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		NONE			
.XX = ±.02 [0.5]		DESCRIPTION		SHEET			
.XXX = ±.005 [0.13]		SNAP-ON BMA JACK TO SMB PLUG CABLE USING RG316 COAX		1 OF 1			
FRACTIONS ± 1/32		SIZE		CAGE CODE			
ANGLES ± 1°		A		53919			
CABLE LENGTH TOLERANCES:		DRAWN BY		HBAKKE			
<12 [305] = ±1 [25] / -0		ITEM NO.		PE3W16831			
>12 [305] ≤ 60 [1524] = ±2 [51] / -0		REV		A			
>60 [1524] ≤ 120 [3048] = ±4 [102] / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN [] ARE MILLIMETERS. COLORS MAY VARY.					
>120 [3048] ≤ 300 [7620] = ±5% / -0							