PASTERNACK®
THE ENGINEER'S RF SOURCE

Snap-On BMA Jack to N Male Cable Using RG316 Coax

RF Cable Assemblies Technical Data Sheet PE3C4944

Configuration

- Connector 1: Snap-On BMA Jack
- Connector 2: N Male
- Cable Type: RG316

Features

- Max Frequency 1,000 MHz
- 69% Phase Velocity
- FEP Jacket
- Good VSWR of 1.4:1
- Gold Plated BMA Contacts
- Low Engagement Force BMA interface
- In stock and ready to ship

Applications

- General Purpose
- Laboratory Use BMA Cable RF Backplanes
- Blind Mate BMA Test
- Rack and Panel
- Phased Array Interconnects
- High Speed Switching Networks

Description

Pasternack's BMA cable assemblies using RG316/U Coax are part of our full line of RF components available for same-day shipping. These BMA cable assemblies are designed to connect BMA system components, BMA racks, or BMA backplanes, delivering signal frequencies as high as 22 GHz. Our family of BMA cables can also be used to connect switching networks or phase-matched antenna arrays where low loss BMA interconnects are desired. If none of our standard options fit your application, you can specify your own custom BMA cable assembly using Pasternack's online Cable Creator.

Our BMA 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 BMA cabling or blind mate rack connections, 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		1,000	MHz
VSWR			1.4:1	
Return Loss			15.56	dB
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms
Jacket Spark			2,000	Vrms

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 N Male Cable Using RG316 Coax PE3C4944

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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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.075	0.11	0.15	0.27	0.38	dB/ft
	0.25	0.36	0.49	0.89	1.25	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter	0.8 in [20.32 mm]

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	0.098 in [2.49 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BMA Jack	N Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Snap-On	
Contact Material and Plating	Beryllium Copper, Gold	Brass, 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

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Environmental Specifications

Temperature

Operating Range	-55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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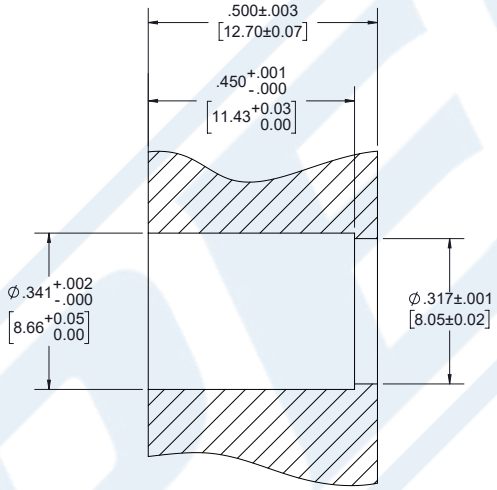
Typical Performance Data



PANEL DRILLING

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How to Order

Part Number Configuration: **PE3C4944 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C4944 — Base Number

Example: PE3C4944-12 = 12 inches long cable
PE3C4944-100cm = 100 cm long cable

Snap-On BMA Jack to N Male 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 N Male Cable Using RG316 Coax PE3C4944

URL: https://www.pasternack.com/bma-jack-n-male-rg316u-cable-assembly-pe3c4944-p.aspx

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PE3C4944 CAD Drawing

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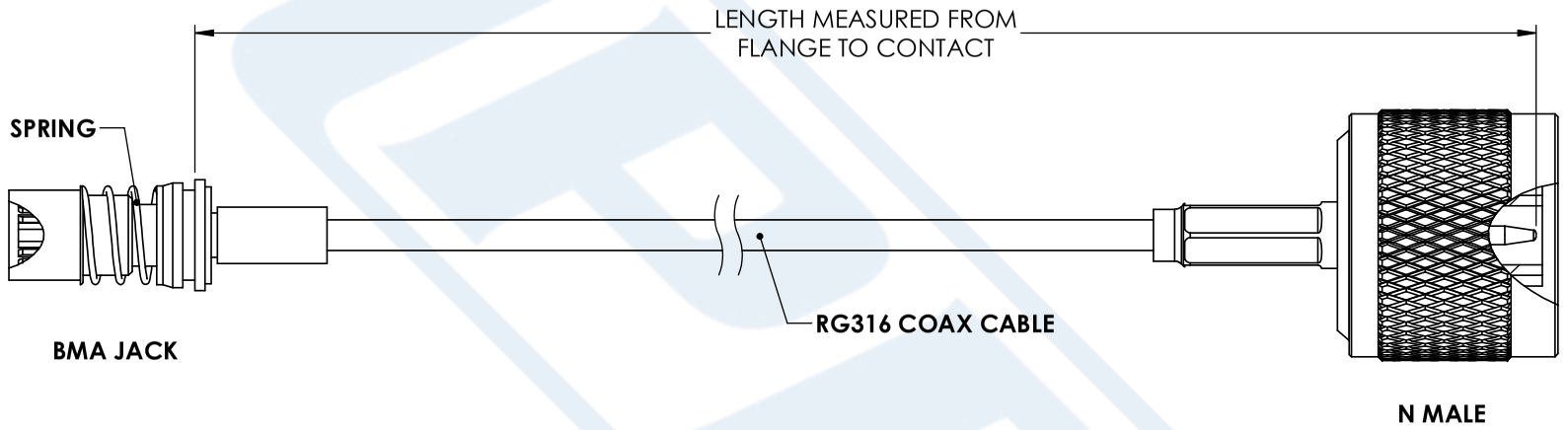

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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DWG TITLE: PE3C4944

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].

CAGE CODE 53919	CAD FILE 01/02/18	SCALE N/A	SIZE A	CN2245