



### **RF Cable Assemblies Technical Data Sheet**

PE3C4934

## Configuration

• Connector 1: Snap-On BMA Jack

Connector 2: BNC Male

Cable Type: LMR-100A

### **Features**

• Max Frequency 3 GHz

- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- · Double Shielded
- PVC 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 LMR-100A-PVC 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.

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 BNC Male Cable Using LMR-100 Coax PE3C4934







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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR		7,000	1.4:1	
Return Loss			15.56	dB
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	Vrms

## **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.07	0.12	0.16	0.24	0.43	dB/ft
	0.23	0.39	0.52	0.79	1.41	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 0.57 in [14.48 mm]

Cable

Cable Type LMR-100A Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel

Dielectric Type PΕ Number of Shields

Shield Layer 1 Aluminum Tape Shield Layer 2 **Tinned Copper Braid** 

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**Jacket Material** PVC, Black Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm] Repeated Minimum Bend Radius 1 in [25.4 mm] **Bending Moment** 0.1 lbs-ft [0.14 N-m] Flat Plate Crush 10 lbs/in [0.18 Kg/mm] Tensile Strength 15 lbs [6.8 Kg]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BMA Jack	BNC 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	50 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:

### **Environmental Specifications**

**Temperature** 

**Operating Range** -40 to +85 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 BMA Jack to BNC Male Cable Using LMR-100 Coax PE3C4934



<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

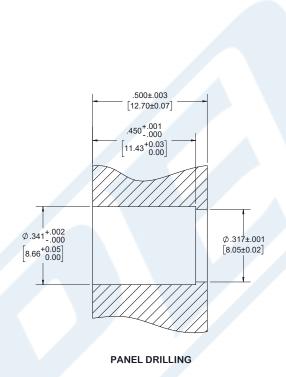




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**Typical Performance Data** 



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## **RF Cable Assemblies Technical Data Sheet**

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#### **How to Order**



Example: PE3C4934-12 = 12 inches long cable PE3C4934-100cm = 100 cm long cable

Snap-On BMA Jack to BNC Male Cable Using LMR-100 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 BNC Male Cable Using LMR-100 Coax PE3C4934

URL: https://www.pasternack.com/bma-jack-bnc-male-Imr100-cable-assembly-pe3c4934-p.aspx

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.



PE3C4934 CAD Drawing
Snap-On BMA Jack to BNC Male Cable Using LMR-100 Coax

