

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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# **RF Cable Assemblies Technical Data Sheet**

# Configuration

- Connector 1: Slide-On BMA Plug Bulkhead
- Connector 2: TNC Male
- Cable Type: LMR-100A

## Features

- Max Frequency 2.5 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: Slide-On BMA Plug Bulkhead to TNC Male Cable Using LMR-100 Coax PE3C4933

ISO 9001 : 2008 Registered





PE3C4933



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# PE3C4933

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		2.5	GHz
VSWR			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
Channel-to-Channel Insertion Loss Match		24		dB

### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units	
Frequency	0.1	0.25	0.5	1	2.5	GHz	
Insertion Loss (Typ.)	0.07	0.12	0.16	0.24	0.4	dB/ft	
	0.23	0.39	0.52	0.79	1.31	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

### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 0.6 in [15.24 mm]

LMR-100A 50 Ohms Solid Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid

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One Time Minimum Bend Radius Repeated Minimum Bend Radius

### Bending Moment Flat Plate Crush Tensile Strength

Jacket Material

Jacket Diameter

PVC, Black 0.11 in [2.79 mm]

0.25 in [6.35 mm] 1 in [25.4 mm] 0.1 lbs-ft [0.14 N-m] 10 lbs/in [0.18 Kg/mm] 15 lbs [6.8 Kg]

### Connectors

Connector 1	Connector 2		
BMA Plug Bulkhead	TNC Male		
50 Ohms	50 Ohms		
Slide-On			
Beryllium Copper, Gold	Beryllium Copper, Gold		
51.18µ in. minimum			
PTFE	Teflon		
Passivated Stainless Steel			
Passivated Stainless Steel	Brass, Silver		
	Brass, Silver		
8 mm			
	BMA Plug Bulkhead 50 Ohms Slide-On Beryllium Copper, Gold 51.18µ in. minimum PTFE Passivated Stainless Steel Passivated Stainless Steel		

Mechanical Specification Notes:

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

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

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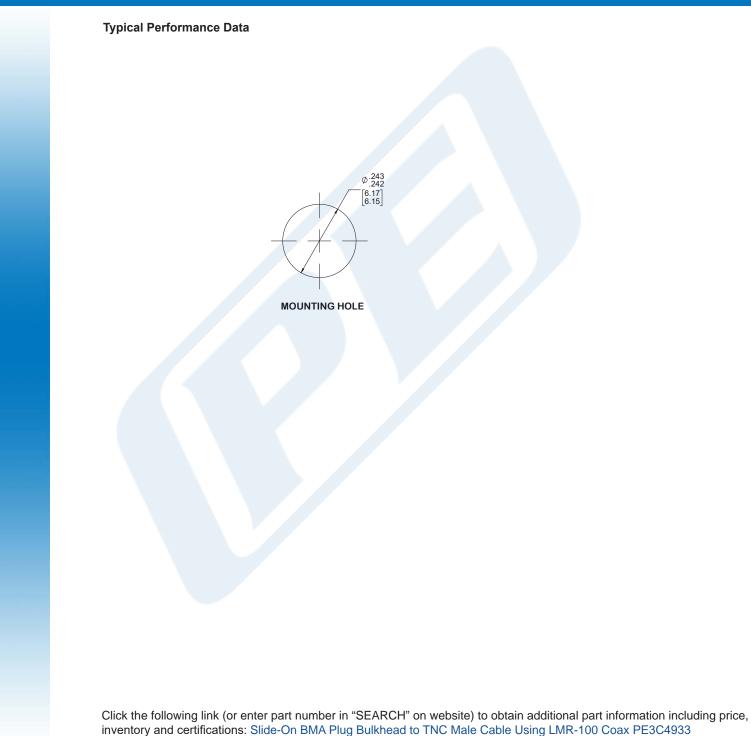
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# PE3C4933

# How to Order PE3C4933 Part Number Configuration: - XX uu - Unit of Measure: cm = Centimeters <blank> = Inches Length Base Number Example: PE3C4933-12 = 12 inches long cable PE3C4933-100cm = 100 cm long cable Slide-On BMA Plug Bulkhead to TNC 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: Slide-On BMA Plug Bulkhead to TNC Male Cable Using LMR-100 Coax PE3C4933 URL: https://www.pasternack.com/bma-plug-tnc-male-Imr100-cable-assembly-pe3c4933-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.

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PE3C4933 CAD Drawing Slide-On BMA Plug Bulkhead to TNC Male Cable Using LMR-100 Coax

