



## Snap-On BMA Jack to Snap-On BMA Jack Cable Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C4923**

#### Configuration

- Connector 1: Snap-On BMA Jack
- Connector 2: Snap-On BMA Jack
- Cable Type: LMR-100A

#### Features

- Max Frequency 5.8 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 Snap-On BMA Jack Cable Using LMR-100 Coax PE3C4923](#)



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#### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units           |
|-------------------------------|---------|---------------|---------|-----------------|
| Frequency Range               | DC      |               | 5.8     | 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            |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.12 | 0.17 | 0.24 | 0.4  | 0.64 | dB/ft |
|                       | 0.39 | 0.56 | 0.79 | 1.31 | 2.1  | 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 0.35 in [8.89 mm]

##### Cable

Cable Type LMR-100A  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid

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 Snap-On BMA Jack Cable Using LMR-100 Coax PE3C4923](#)



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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                |
|--------------------------------------|----------------------------|----------------------------|
| Type                                 | BMA Jack                   | BMA Jack                   |
| Impedance                            | 50 Ohms                    | 50 Ohms                    |
| Connection Method                    | Snap-On                    | Snap-On                    |
| Contact Material and Plating         | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Contact Plating Specification        | 51.18µ in. minimum         | 51.18µ in. minimum         |
| Dielectric Type                      | PTFE                       | PTFE                       |
| Outer Conductor Material and Plating | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Body Material and Plating            | Passivated Stainless Steel | Passivated Stainless Steel |

#### 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

-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 Snap-On BMA Jack Cable Using LMR-100 Coax PE3C4923](#)

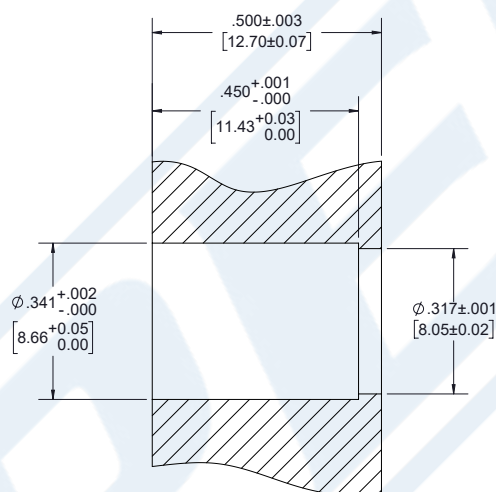


Snap-On BMA Jack to Snap-On BMA Jack  
Cable Using LMR-100 Coax

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### Typical Performance Data



PANEL DRILLING

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 Snap-On BMA Jack Cable Using LMR-100 Coax PE3C4923](#)



## Snap-On BMA Jack to Snap-On BMA Jack Cable Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C4923**

#### How to Order

Part Number Configuration:

**PE3C4923**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C4923-12 = 12 inches long cable  
PE3C4923-100cm = 100 cm long cable

Snap-On BMA Jack to Snap-On BMA Jack 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.

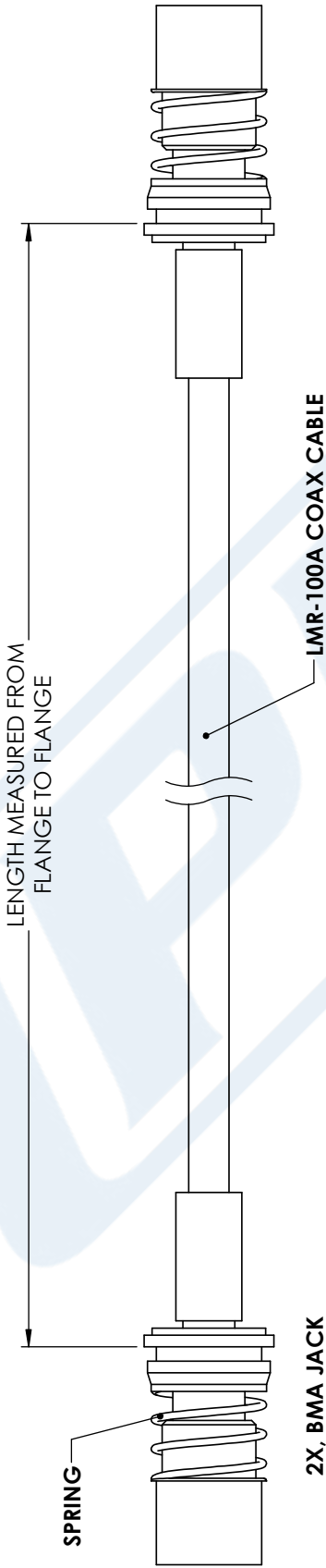
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Snap-On BMA Jack to Snap-On BMA Jack Cable Using LMR-100 Coax PE3C4923](#)

URL: <https://www.pasternack.com/bma-jack-bma-jack-lmr100-cable-assembly-pe3c4923-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.

PE3C4923 CAD Drawing

Snap-On BMA Jack to Snap-On BMA Jack Cable Using LMR-100 Coax



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

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



**PASTERNAK®**  
THE ENGINEER'S RF SOURCE

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|           |          |
|-----------|----------|
| DWG TITLE | PE3C4923 |
| CAGE CODE | 53919    |

|                                                                                                                                                                                     |          |          |       |     |      |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------|-----|------|---|
| NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. | CAD FILE | 12/26/17 | SCALE | N/A | SIZE | A |
| CN2245                                                                                                                                                                              |          |          |       |     |      |   |