

RF Cable Assemblies Technical Data Sheet

Configuration

- Connector 1: Slide-On BMA Plug Bulkhead
- Connector 2: Slide-On BMA Plug Bulkhead
- 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
- 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 Slide-On BMA Plug Bulkhead Cable 24 Inch Length Using LMR-100 Coax PE3C4921-24

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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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.)	0.44	0.54	0.68	1	1.48	dB

Mechanical Specifications

Cable Assembly Length* Diameter

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

One Time Minimum Bend Radius

24 in [609.6 mm] 0.315 in [8 mm]

LMR-100A 50 Ohms Solid Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

0.25 in [6.35 mm]

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Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength 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

Description	Connector 1	Connector 2	
Туре	BMA Plug Bulkhead	BMA Plug Bulkhead	
Impedance	50 Ohms	50 Ohms	
Connection Method	Slide-On	Slide-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	Passivated Stainless Steel	Passivated Stainless Steel	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel	
Hex Size	8 mm	8 mm	

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or ± 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:

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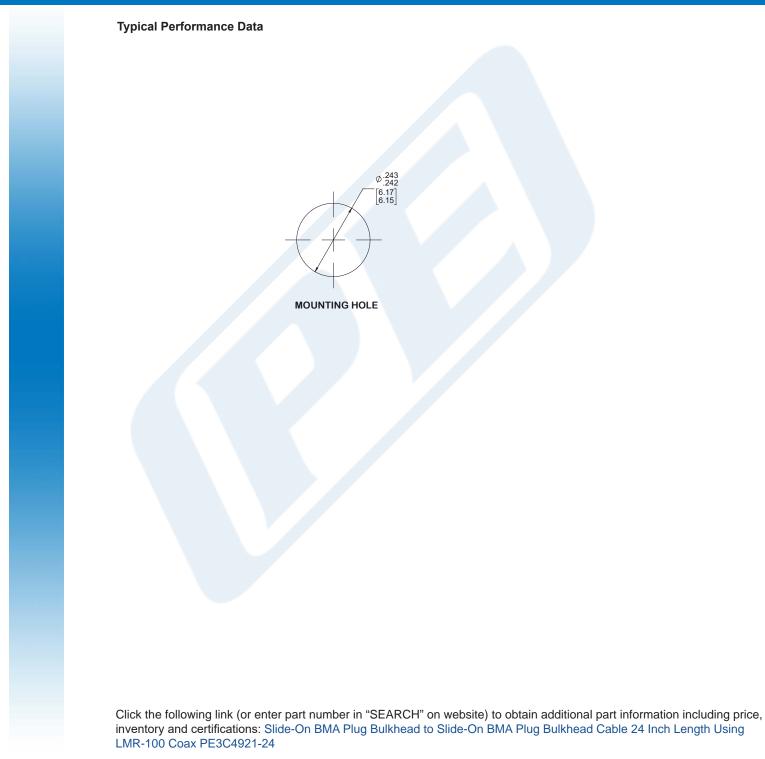
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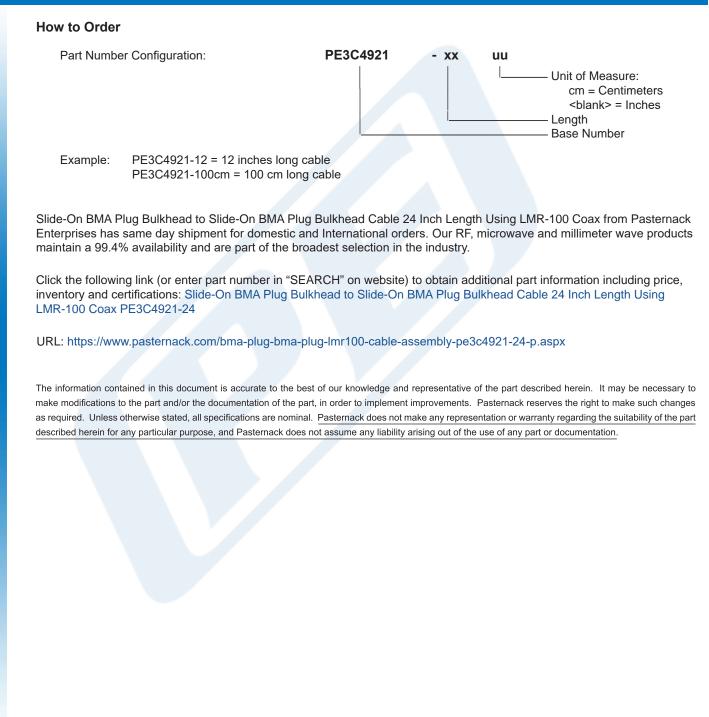
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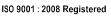


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PE3C4921-24 CAD Drawing Slide-On BMA Plug Bulkhead to Slide-On BMA Plug Bulkhead Cable 24 Inch Length Using LMR-100 Coax

