

SMB Plug to BNC Male Low Loss Cable Using LMR-100A-UF Coax with HeatShrink



PE3W14249/HS

Configuration

- Connector 1: SMB Plug
- Connector 2: BNC Male
- Cable Type: LMR-100A-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14249/HS SMB plug to BNC male cable using LMR-100A-UF coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMB to BNC cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3W14249/HS SMB plug to BNC male cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			335	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W14249/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.115	0.166	0.24	0.435	dB/ft	
			0.23	0.38	0.55	0.79	1.43	dB/m	
PE3W14249/HS-24	24 In	Insertion Loss (Typ.)	0.34	0.43	0.54	0.68	1.07	dB	0.056
PE3W14249/HS-36	36 In	Insertion Loss (Typ.)	0.41	0.55	0.7	0.92	1.51	dB	0.064
PE3W14249/HS-48	48 In	Insertion Loss (Typ.)	0.48	0.66	0.87	1.16	1.94	dB	0.072
PE3W14249/HS-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.58	0.75	0.99	1.63	dB	0.066
PE3W14249/HS-200CM	200 CM	Insertion Loss (Typ.)	0.66	0.96	1.29	1.78	3.06	dB	0.092

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.047 pounds
Additional Weight per Inch:	0.00067 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.039 lbs [17.69 g]

Cable

Cable Type	LMR-100A-UF
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	TPE, 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMB Plug	BNC Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Seal Gasket Material		Silicone

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration:

PE3W14249/HS - xx uu



Example: PE3W14249/HS-12 = 12 inches long cable
PE3W14249/HS-100cm = 100 cm long cable

SMB Plug to BNC Male Low Loss Cable Using LMR-100A-UF Coax with HeatShrink 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: [SMB Plug to BNC Male Low Loss Cable Using LMR-100A-UF Coax with HeatShrink PE3W14249/HS](https://www.pasternack.com/smb-plug-to-bnc-male-low-loss-cable-using-lmr-100a-uf-with-heatshrink-pe3w14249-hs)

URL: <https://www.pasternack.com/smb-plug-to-bnc-male-low-loss-cable-using-lmr-100a-uf-with-heatshrink-pe3w14249-hs-p.aspx>

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PE3W14249/HS CAD Drawing

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