

BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink



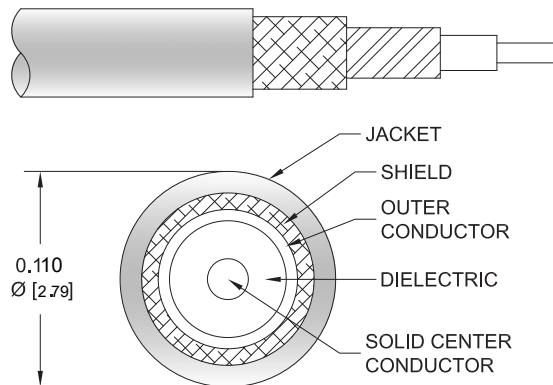
PE3C2139/HS

Configuration

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

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2139/HS BNC male to BNC male cable using LMR-100 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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3C2139/HS BNC male 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]

BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink



PE3C2139/HS

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	100	250	500	1000	3000	MHz	
PE3C2139/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.064	0.115	0.165	0.24	0.432	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3C2139/HS-24	24 in	Insertion Loss (Typ.)	0.33	0.43	0.53	0.68	1.07	dB	0.072
PE3C2139/HS-36	36 in	Insertion Loss (Typ.)	0.4	0.55	0.7	0.92	1.5	dB	0.081
PE3C2139/HS-48	48 in	Insertion Loss (Typ.)	0.46	0.66	0.86	1.16	1.93	dB	0.09
PE3C2139/HS-100CM	100 CM	Insertion Loss (Typ.)	0.41	0.58	0.75	0.99	1.62	dB	0.084
PE3C2139/HS-200CM	200 CM	Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.04	dB	0.114

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: 0.063 pounds
Additional Weight per Inch: 0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
Weight 0.054 lbs [24.49 g]

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
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]

BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink



PE3C2139/HS

Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μ in minimum	50 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in minimum	100 μ in minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 μ in minimum	100 μ in minimum

Environmental Specifications

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink

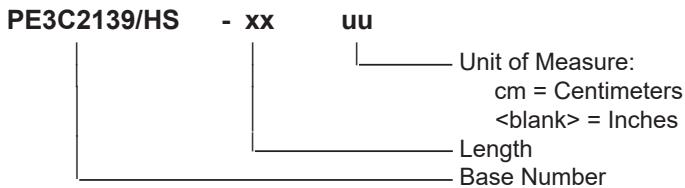


PE3C2139/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C2139/HS-12 = 12 inches long cable
PE3C2139/HS-100cm = 100 cm long cable

BNC Male to BNC Male Low Loss Cable Using LMR-100 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: [BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3C2139/HS](#)

URL: <https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3c2139-hs-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C2139/HS CAD Drawing

BNC Male to BNC Male Low Loss Cable Using LMR-100 Coax with HeatShrink

