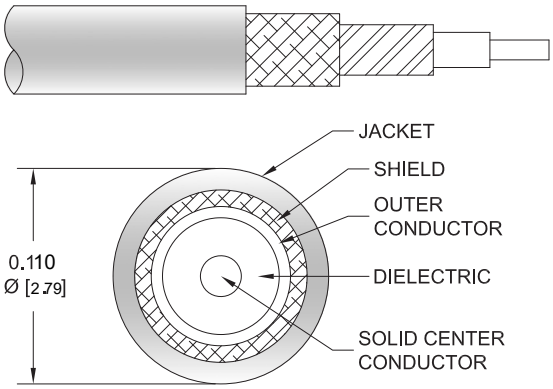
Reverse Polarity MCX Male to BNC Male Low Loss Cable Using LMR-100 Coax

PE3W13214

Configuration

- Connector 1: MCX Male Reverse Polarity
- 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 PE3W13214 reverse polarity MCX 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 reverse polarity MCX to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W13214 reverse polarity MCX 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]

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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	100	250	500	1000	3000	MHz	
PE3W13214	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.064	0.115	0.165	0.24	dB/ft	
			0.13	0.21	0.38	0.55	0.79	dB/m	
PE3W13214-24	24 In	Insertion Loss (Typ.)	0.28	0.33	0.43	0.53	0.68	dB	0.049
PE3W13214-36	36 In	Insertion Loss (Typ.)	0.32	0.4	0.55	0.7	0.92	dB	0.058
PE3W13214-48	48 In	Insertion Loss (Typ.)	0.36	0.46	0.66	0.86	1.16	dB	0.067
PE3W13214-100CM	100 CM	Insertion Loss (Typ.)	0.33	0.41	0.58	0.75	0.99	dB	0.061
PE3W13214-200CM	200 CM	Insertion Loss (Typ.)	0.46	0.62	0.96	1.29	1.78	dB	0.091

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:	0.04	pounds
Additional Weight per Inch:	0.00075	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.04 lbs [18.14 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]

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Connectors

Description	Connector 1	Connector 2
Type	MCX Male Reverse Polarity	BNC Male
Specification	MIL-C-39012	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold over Nickel	Brass, Nickel
Body Plating Specification	10 µin minimum	100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum

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: **PE3W13214 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3W13214 — Base Number

Example: PE3W13214-12 = 12 inches long cable
PE3W13214-100cm = 100 cm long cable

Reverse Polarity MCX Male to BNC Male Low Loss 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: Reverse Polarity MCX Male to BNC Male Low Loss Cable Using LMR-100 Coax PE3W13214

URL: https://www.pasternack.com/reverse-polarity-mcx-male-to-bnc-male-low-loss-cable-using-lmr-100-pe3w13214-p.aspx

PE3W13214 CAD Drawing

Reverse Polarity MCX Male to BNC Male Low Loss Cable Using LMR-100 Coax