



Reverse Polarity SMA Plug to N Male Low Loss Cable Using LMR-400 Coax

TECHNICAL DATA SHEET

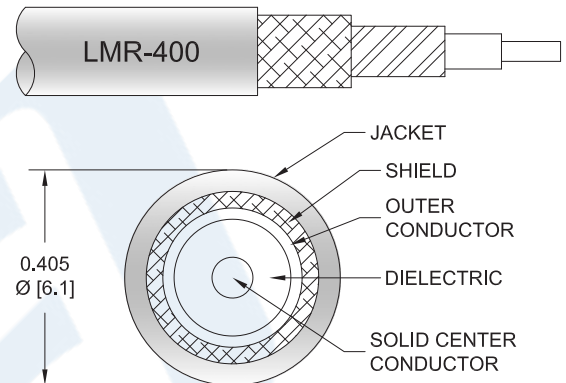
PE3W00049

Configuration

- Connector 1: SMA Plug Reverse Polarity
- Connector 2: N Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W00049 reverse polarity SMA plug to type N male cable using LMR-400 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 SMA to type N cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W00049 reverse polarity SMA plug to type N male cable assembly operates to 5.8 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Plug to N Male Low Loss Cable Using LMR-400 Coax PE3W00049](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ω /1000ft [Ω /Km]
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
PE3W00049	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.03	0.04	0.07	0.11	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3W00049-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	0.212
PE3W00049-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.28
PE3W00049-36	36 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.347
PE3W00049-48	48 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.414
PE3W00049-60	60 inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	0.481

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:	0.212 pounds
Additional Weight per Inch:	0.00559 pounds

Mechanical Specifications

Cable Assembly

Weight	0.212 lbs [96.16 g]
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Cable

Cable Type	LMR-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Plug Reverse Polarity Threaded	N Male Threaded
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification		15 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Gold	Brass, Tri-Metal
Hex Size	5/16 in.	18 mm
Torque	5 in-lbs [0.57 Nm]	9 in-lbs [1.02 Nm]

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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TECHNICAL DATA SHEET

PE3W00049

How to Order

Part Number Configuration:

PE3W00049

- **xx**

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

Example: PE3W00049-12 = 12 inches long cable
PE3W00049-100cm = 100 cm long cable

Reverse Polarity SMA Plug to N Male Low Loss Cable Using LMR-400 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 SMA Plug to N Male Low Loss Cable Using LMR-400 Coax PE3W00049](https://www.pasternack.com/reverse-polarity-sma-plug-to-n-male-low-loss-cable-using-lmr-400-pe3w00049-p.aspx)

URL: <https://www.pasternack.com/reverse-polarity-sma-plug-to-n-male-low-loss-cable-using-lmr-400-pe3w00049-p.aspx>

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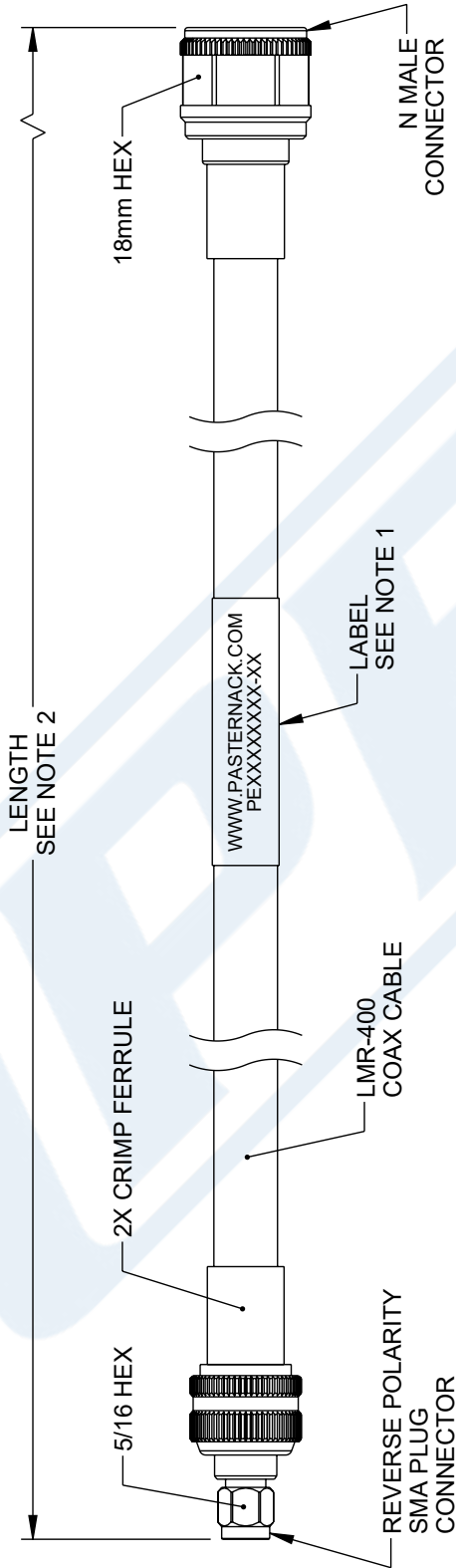
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REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	10/9/2023
		CHANGED BY	AGANWANI



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	CABLE LENGTH TOLERANCES:
	≤12 [305] = ±.1 [25] / -0
	>12 [305] ≤ 60 [1524] = ±.2 [51] / -0
	>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
	>120 [3048] ≤ 300 [7620] = ±.8 [51] / -0
	>300 [7620] = ±.98 [7.62] / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UN-DIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	



Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION

Reverse Polarity SMA Plug to N Male Low Loss Cable Using LMR-400 Coax



INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
SCALE	SHEET
NONE	1 OF 1

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE3W00049	A