

N Male RA to N Male RA Low Loss Cable 48 Inch Length Using LMR-400 Coax with Times Microwave Components with HeatShrink and 180 Deg. Clock

PE3C0107/PH180-48

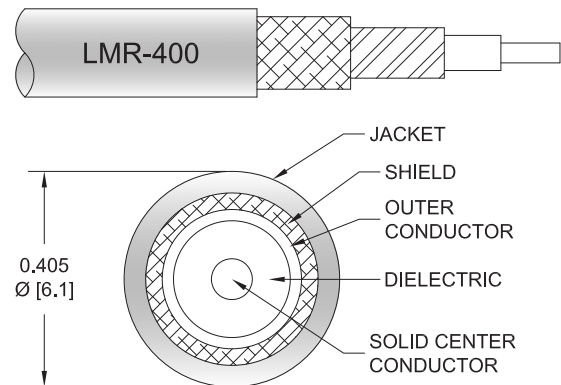


Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Male Right Angle
- 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 PE3C0107/PH180-48 type N male right angle to type N male right angle 48 inch 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3C0107/PH180-48 type N male to type N male cable assembly operates to 5.8 GHz. The right angle type N interfaces on the LMR-400 cable allow for easier connections in tight spaces. 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		5.8	GHz
VSWR			1.4:1	
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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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	
PE3C0107/PH180	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	
PE3C0107/PH180-12	12 inch	Insertion Loss (Typ.)	0.42	0.43	0.45	0.47	0.51	dB	0.467
PE3C0107/PH180-24	24 inch	Insertion Loss (Typ.)	0.44	0.46	0.49	0.54	0.62	dB	0.535
PE3C0107/PH180-36	36 inch	Insertion Loss (Typ.)	0.46	0.49	0.53	0.61	0.73	dB	0.602
PE3C0107/PH180-48	48 inch	Insertion Loss (Typ.)	0.48	0.52	0.57	0.68	0.84	dB	0.669
PE3C0107/PH180-60	60 inch	Insertion Loss (Typ.)	0.5	0.54	0.61	0.74	0.94	dB	0.736

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:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.467 pounds
Additional Weight per Inch:	0.00559 pounds

Mechanical Specifications

Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.669 lbs [303.45 g]

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]

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Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	1.27 µm minimum	1.27 µm minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 µm minimum	2 µm minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	2 µm minimum	2 µm minimum
Torque	44 in-lbs 4.97 Nm	44 in-lbs 4.97 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration: **PE3C0107/PH180 - xx uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length
Base Number

Example: PE3C0107/PH180-12 = 12 inches long cable
PE3C0107/PH180-100cm = 100 cm long cable

N Male RA to N Male RA Low Loss Cable 48 Inch Length Using LMR-400 Coax with Times Microwave Components with HeatShrink and 180 Deg. Clock 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: [N Male RA to N Male RA Low Loss Cable 48 Inch Length Using LMR®-400 Coax with Times Microwave Components with HeatShrink and 180 Deg. Clock PE3C0107/PH180-48](https://www.pasternack.com/n-male-right-angle-to-n-male-low-loss-cable-48-inch-length-using-lmr-400-with-heatshrink-and-180-deg.-clock-pe3c0107-ph180-48-p.aspx)

URL: <https://www.pasternack.com/n-male-right-angle-to-n-male-low-loss-cable-48-inch-length-using-lmr-400-with-heatshrink-and-180-deg.-clock-pe3c0107-ph180-48-p.aspx>

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PE3C0107/PH180-48 CAD Drawing

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