

N Male to N Male Low Loss Cable Using LMR-400 Coax with HeatShrink, LF Solder



RF Cable Assemblies Technical Data Sheet

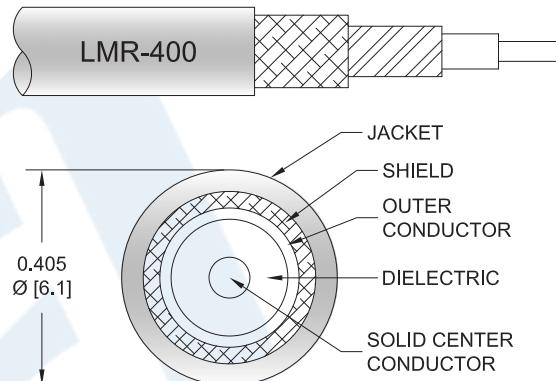
PE3C0046LF/HS

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0046LF/HS type N male 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3C0046LF/HS type N male to type N male cable assembly operates to 6 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: [N Male to N Male Low Loss Cable Using LMR-400 Coax with HeatShrink, LF Solder PE3C0046LF/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ω/1000ft [Ω/Km]
Jacket Spark			8,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft
	0.07	0.09	0.13	0.22	0.35	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.217 lbs [98.43 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]

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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	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 μ in minimum	15 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	18 mm	18 mm

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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PE3C0046LF/HS

How to Order

Part Number Configuration:

PE3C0046LF/HS - xx**uu**

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

Length
Base Number

Example: PE3C0046LF/HS-12 = 12 inches long cable
PE3C0046LF/HS-100cm = 100 cm long cable

N Male to N Male Low Loss Cable Using LMR-400 Coax with HeatShrink, LF Solder 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.

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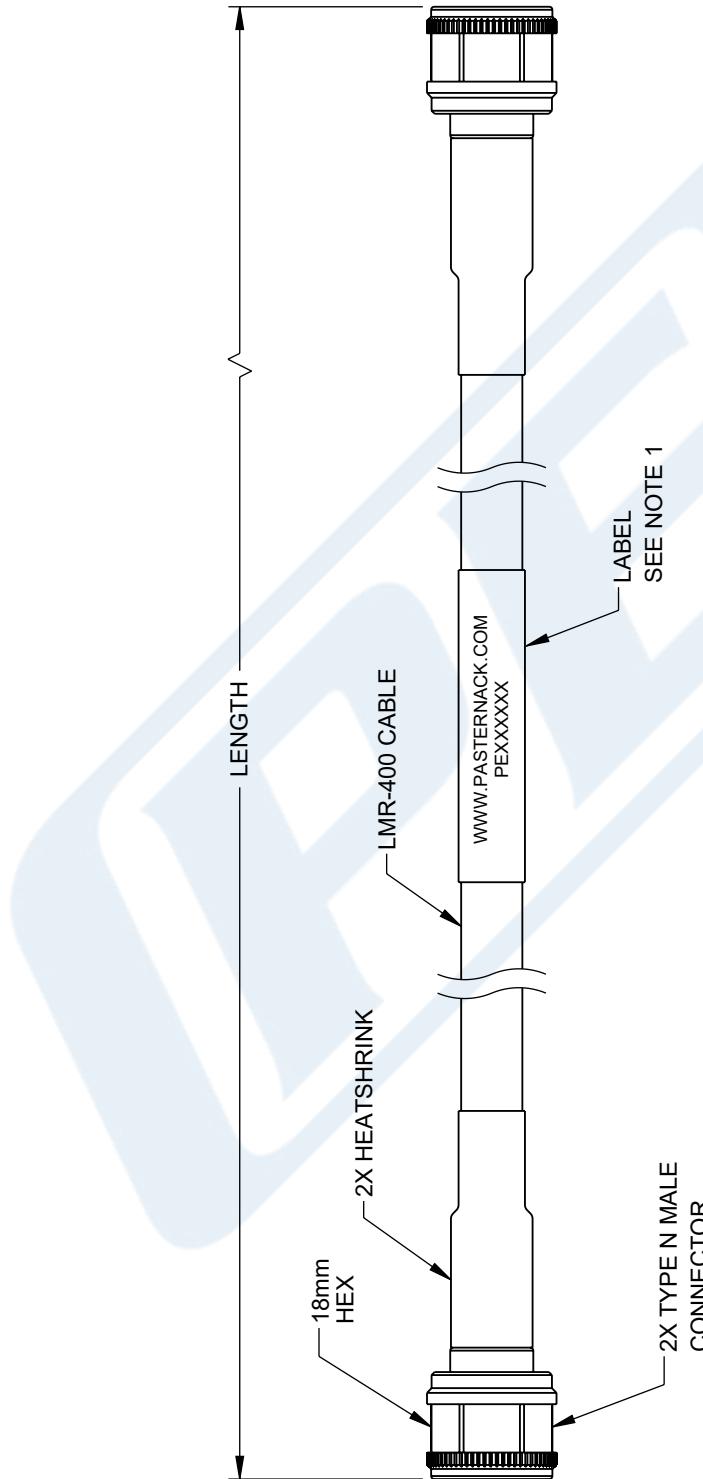
URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-400-with-heatshrink-lf-solder-pe3c0046lf-hs-p.aspx>

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PE3C0046LF/HS CAD Drawing

N Male to N Male Low Loss Cable Using LMR-400 Coax with HeatShrink, LF Solder

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	05/22/2023	BPUCHASKI	AGANWANI



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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 PEI PASTERNACK® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET		REV A
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		SCALE NONE	1 OF 1	
TOLERANCES: $X = \pm .2$ $[5]$ FRACTIONS $XX = \pm .02$ $[.5]$ $\pm .1/32$ $XXX = \pm .005$ $[.13]$ ANGLES $\pm 1^\circ$ CABLE LENGTH TOLERANCES: ≤ 12 [305] ≤ 60 [1524] ± 1 [25] -0 > 12 [305] > 120 [3048] $= +4$ [102] -0 > 120 [3048] > 300 [7620] $= +6$ [152] -0 > 300 [7620] > 500 [12700] $= +5\%$ -0	DESCRIPTION N Male to N Male Low Loss Cable Using LMR-400 Coax with HeatShrink, LF Solder	ITEM NO. PE3C0046LF/H5		
SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI				