



N Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder

TECHNICAL DATA SHEET

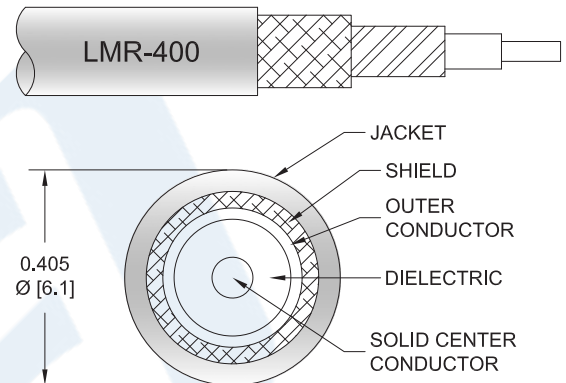
PE3C2309LF

Configuration

- Connector 1: N Male
- 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 PE3C2309LF 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 PE3C2309LF type N male 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: [N Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder PE3C2309LF](#)



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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]		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	
PE3C2309LF	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	
PE3C2309LF-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	0.269
PE3C2309LF-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.337
PE3C2309LF-36	36 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.404
PE3C2309LF-48	48 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.471
PE3C2309LF-60	60 inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	0.538

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:	0.269 pounds
Additional Weight per Inch:	0.00559 pounds

Mechanical Specifications

Cable Assembly

Weight 0.269 lbs [122.02 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	N Male Threaded	N Male Threaded
Impedance	50 Ohms	50 Ohms
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, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 μ in. minimum	150 μ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 μ in. minimum	150 μ in. minimum
Hex Size	13/16 inch	13/16 inch

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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How to Order

Part Number Configuration:

PE3C2309LF - xx uu

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

Example: PE3C2309LF-12 = 12 inches long cable
PE3C2309LF-100cm = 100 cm long cable

N Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, 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.

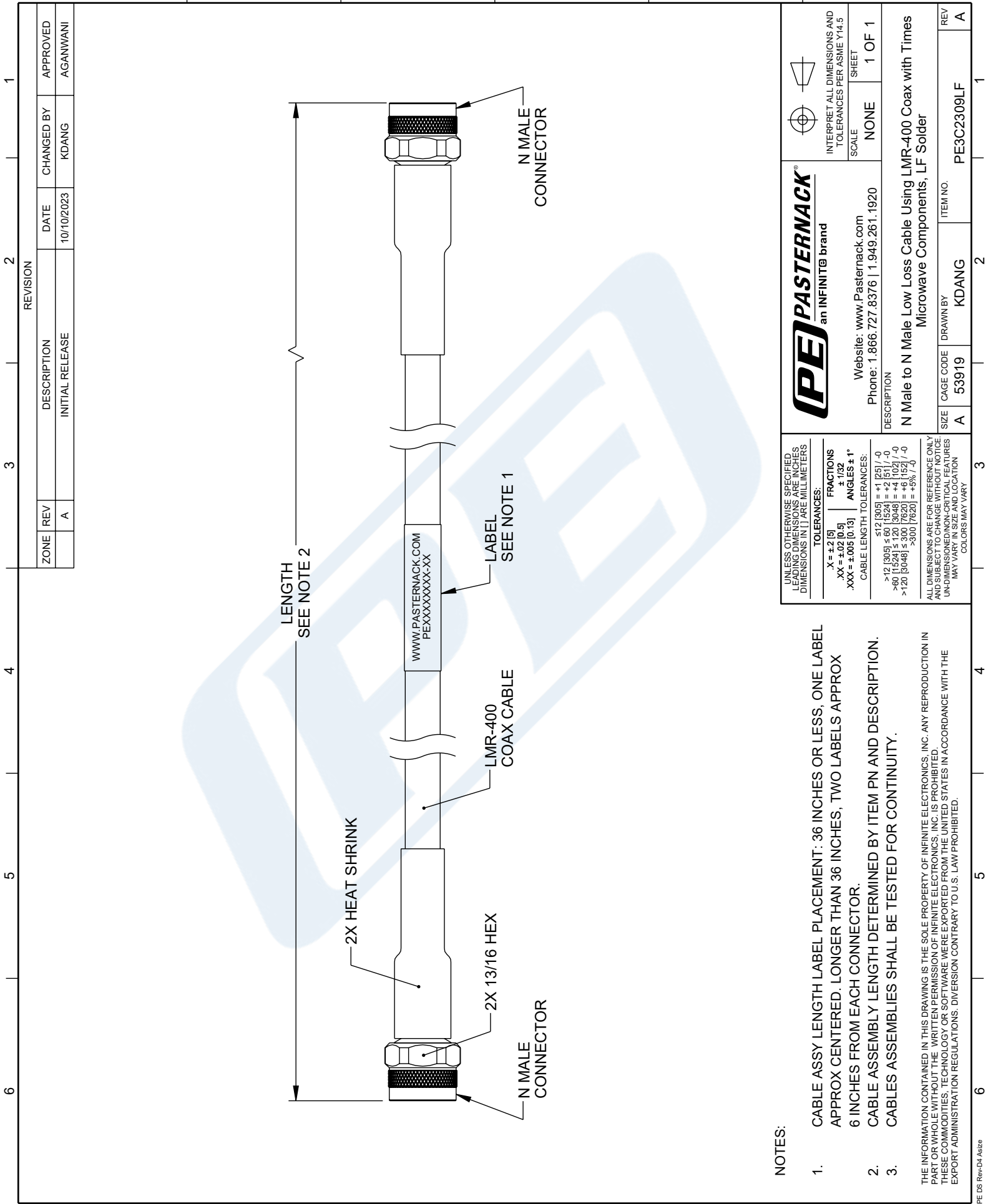
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URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-400-lf-solder-pe3c2309lf-p.aspx>

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PE3C2309LF CAD Drawing

F Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder



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 IN 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]
>12 [305] ≤ 60 [1524]	±.2 [51]
>60 [1524] ≤ 120 [3048]	±.4 [102]
>120 [3048]	±.8 [92]
>300 [7620]	±.98 [7.9]
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE. UNDIMENSIONED 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
N Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components, LF Solder

SIZE	CABLE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3C2309LF

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

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/10/2023	KDANG	AGANWANI

REVISION	
1	
2	
3	
4	
5	
6	