



## N Male to N Male Low Loss Cable Using LMR-400 Coax with Times Microwave Components with HeatShrink

### TECHNICAL DATA SHEET

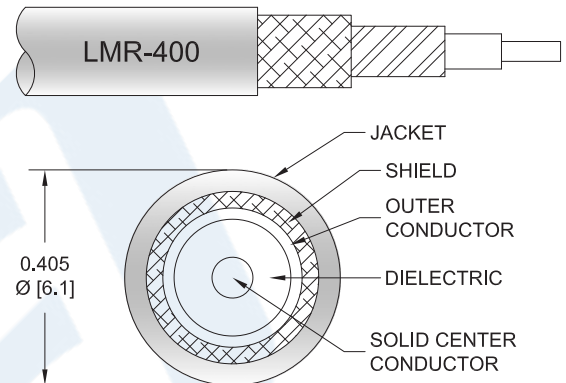
PE3C2309/HS

#### 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 PE3C2309/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 PE3C2309/HS 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 with HeatShrink PE3C2309/HS](#)



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PE3C2309/HS

#### 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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		1.65 [5.41]		$\Omega$ /1000ft [ $\Omega$ /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	
PE3C2309/HS	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	
PE3C2309/HS-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	0.269
PE3C2309/HS-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.337
PE3C2309/HS-36	36 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.404
PE3C2309/HS-48	48 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.471
PE3C2309/HS-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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PE3C2309/HS

#### 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 $\mu$ in. minimum	50 $\mu$ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 $\mu$ in. minimum	150 $\mu$ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 $\mu$ in. minimum	150 $\mu$ 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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### TECHNICAL DATA SHEET

PE3C2309/HS

#### How to Order

Part Number Configuration:

PE3C2309/HS - xx uu

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

Example: PE3C2309/HS-12 = 12 inches long cable  
PE3C2309/HS-100cm = 100 cm long cable

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

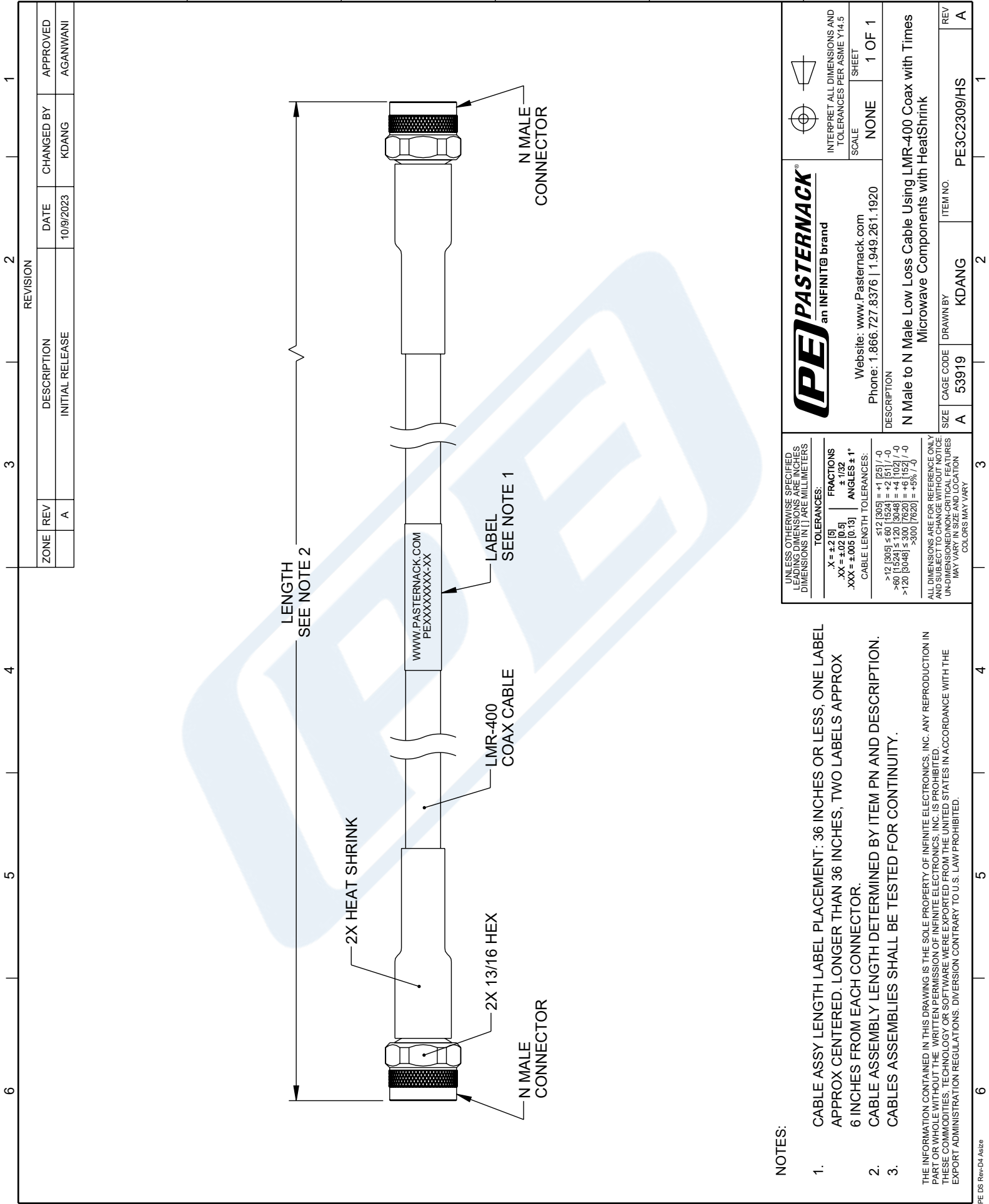
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URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-400-with-heatshrink-pe3c2309-hs-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE3C2309/HS CAD Drawing

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



LENGTH  
SEE NOTE 2

2X HEAT SHRINK

2X 13/16 HEX

LMR-400  
COAX CABLE

WWW.PASTERNAK.COM  
PEXXXXXXXX-XX

LABEL  
SEE NOTE 1

N MALE  
CONNECTOR

N MALE  
CONNECTOR

**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] / -0
>12 [305] ≤ 60 [1524]	± 2 [51] / -0
>60 [1524] ≤ 120 [3048]	± 4 [102] / -0
>120 [3048]	± 8 [93] / -0
>300 [7620]	± 16 [93] / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE. CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	



Website: [www.Pasternack.com](http://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 with HeatShrink

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

SIZE A	CABLE CODE 53919	DRAWN BY KDANG	ITEM NO. PE3C2309/HS	REV A
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ZONE		REVISION		APPROVED	
REV	DESCRIPTION	DATE	CHANGED BY		
A	INITIAL RELEASE	10/9/2023	KDANG		AGANWANI