



## N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink

### RF Cable Assemblies Technical Data Sheet

**PE3W13824/HS**

#### Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: LMR-LW400

#### Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W13824/HS type N male to SMA male cable using LMR-LW400 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-LW400 coax. The PE3W13824/HS type N male to SMA male cable assembly operates to 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 SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink PE3W13824/HS](#)



## N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink

### RF Cable Assemblies Technical Data Sheet

**PE3W13824/HS**

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Velocity of Propagation		84		%
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		6.1 [20.01]		Ω/1000ft [Ω/Km]
Jacket Spark			8,000	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	4	8	GHz
Insertion Loss (Typ.)	0.028	0.041	0.06	0.086	0.13	dB/ft
	0.09	0.13	0.2	0.28	0.43	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 0.195 lbs [88.45 g]

##### Cable

Cable Type LMR-LW400  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type Foam PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Aluminum  
 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]

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 SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink PE3W13824/HS](#)



N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink

**RF Cable Assemblies Technical Data Sheet**

**PE3W13824/HS**

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	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Gold
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Gold
Hex Size	18 mm	5/16 inch
Torque		3 in-lbs [0.34 Nm]

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +85 deg C
-----------------	------------------

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

**Plotted and Other Data**

Notes:

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 SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink PE3W13824/HS](#)



N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink

**RF Cable Assemblies Technical Data Sheet**

**PE3W13824/HS**

**How to Order**

Part Number Configuration:

**PE3W13824/HS - xx uu**

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

Example: PE3W13824/HS-12 = 12 inches long cable  
PE3W13824/HS-100cm = 100 cm long cable

N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax 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.

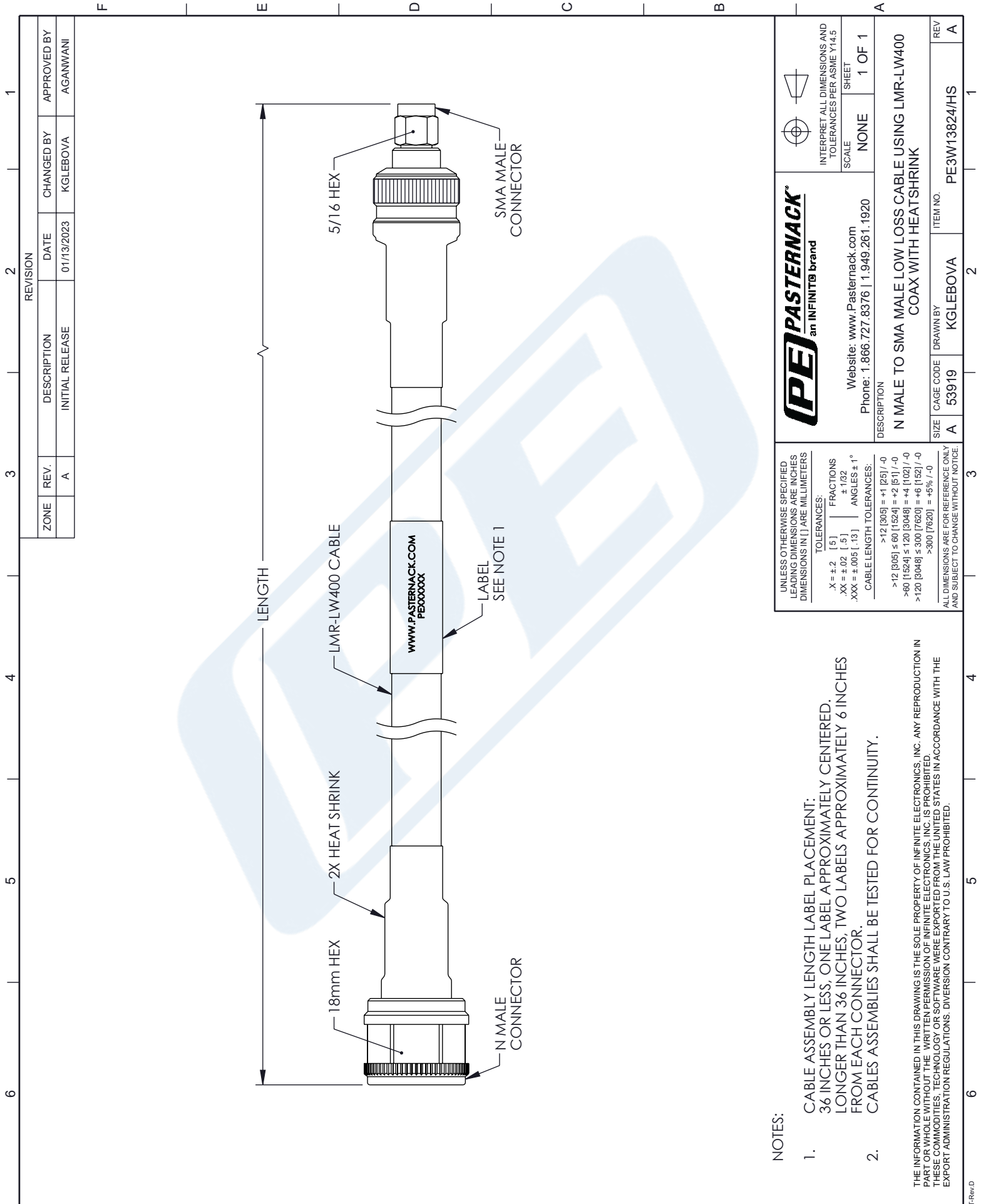
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink PE3W13824/HS](https://www.pasternack.com/n-male-to-sma-male-low-loss-cable-using-lmr-lw400-with-heatshrink-pe3w13824-hs-p.aspx)

URL: <https://www.pasternack.com/n-male-to-sma-male-low-loss-cable-using-lmr-lw400-with-heatshrink-pe3w13824-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.

# PE3W13824/HS CAD Drawing

N Male to SMA Male Low Loss Cable Using LMR-LW400 Coax with HeatShrink



REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

**PE PASTERNAK**  
an INFINIT® brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
N MALE TO SMA MALE LOW LOSS CABLE USING LMR-LW400  
COAX WITH HEATSHRINK

SCALE: NONE  
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

ITEM NO. PE3W13824/HS  
CAGE CODE 53919  
DRAWN BY KGLEBOVA

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [ .5 ] FRACTIONS ±.1/32  
 .XX = ±.02 [ .5 ] ANGLES ± 1°  
 .XXX = ±.005 [ .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] = +6 [152] / -0  
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.