



# SMA Male to N Male Cable 24 Inch Length Using 160 Series Coax with HeatShrink, LF Solder, RoHS

## RF Cable Assemblies Technical Data Sheet

PE304-24

### Configuration

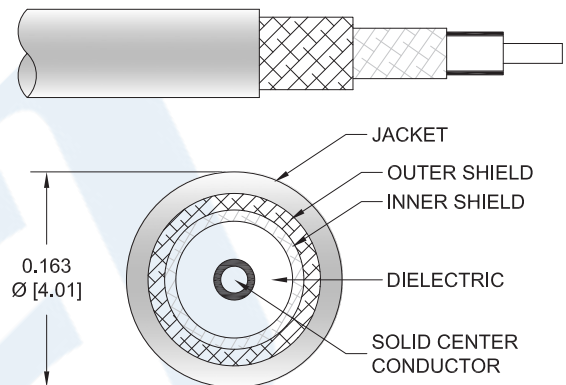
- Connector 1: SMA Male
- Connector 2: N Male
- Cable Type: 160 Series

### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

### Applications

- General Purpose
- Laboratory Use



### Description

Pasternack's PE304-24 SMA male to type N male 24 inch cable using 160 series 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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible 160 series coax. The PE304-24 SMA male to type N male cable assembly operates to 18 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 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		18	GHz
VSWR			1.35:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to N Male Cable 24 Inch Length Using 160 Series Coax with HeatShrink, LF Solder, RoHS PE304-24](#)





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**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	10	18	GHz
Insertion Loss (Typ.)	0.22	0.4	0.52	0.8	1.16	dB

**Electrical Specification Notes:**

Insertion loss does not include the loss of the connectors.  
 Insertion loss is estimated as 0.05 x sqrt(fGHz) dB per connector.  
 Short lengths up to 12" long may exhibit VSWR measurements up to 9% higher.  
 Amplitude variation not to exceed 10% in a coiled vs uncoiled, a coil is defined as a 4% loop.

**Mechanical Specifications**

**Cable Assembly**

Length\* 24 in [609.6 mm]  
 Weight 0.163 lbs [73.94 g]

**Cable**

Cable Type 160 Series  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Tape  
 Shield Layer 2 Silver Plated Copper Braid  
 Jacket Material FEP, Blue  
 Jacket Diameter 0.163 in [4.14 mm]  
 Repeated Minimum Bend Radius 0.82 in [20.83 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Gold	Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Hex Size	5/16 inch	13/16 inch
Torque	8 in-lbs [0.9 Nm]	15 in-lbs [1.7 Nm]

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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**How to Order**

Part Number Configuration:

**PE304 - xx uu**

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

Example: PE304-12 = 12 inches long cable  
PE304-100cm = 100 cm long cable

SMA Male to N Male Cable 24 Inch Length Using 160 Series Coax with HeatShrink, LF Solder, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: [SMA Male to N Male Cable 24 Inch Length Using 160 Series Coax with HeatShrink, LF Solder, RoHS PE304-24](https://www.pasternack.com/sma-male-n-male-pe-p141-cable-assembly-pe304-24-p.aspx)

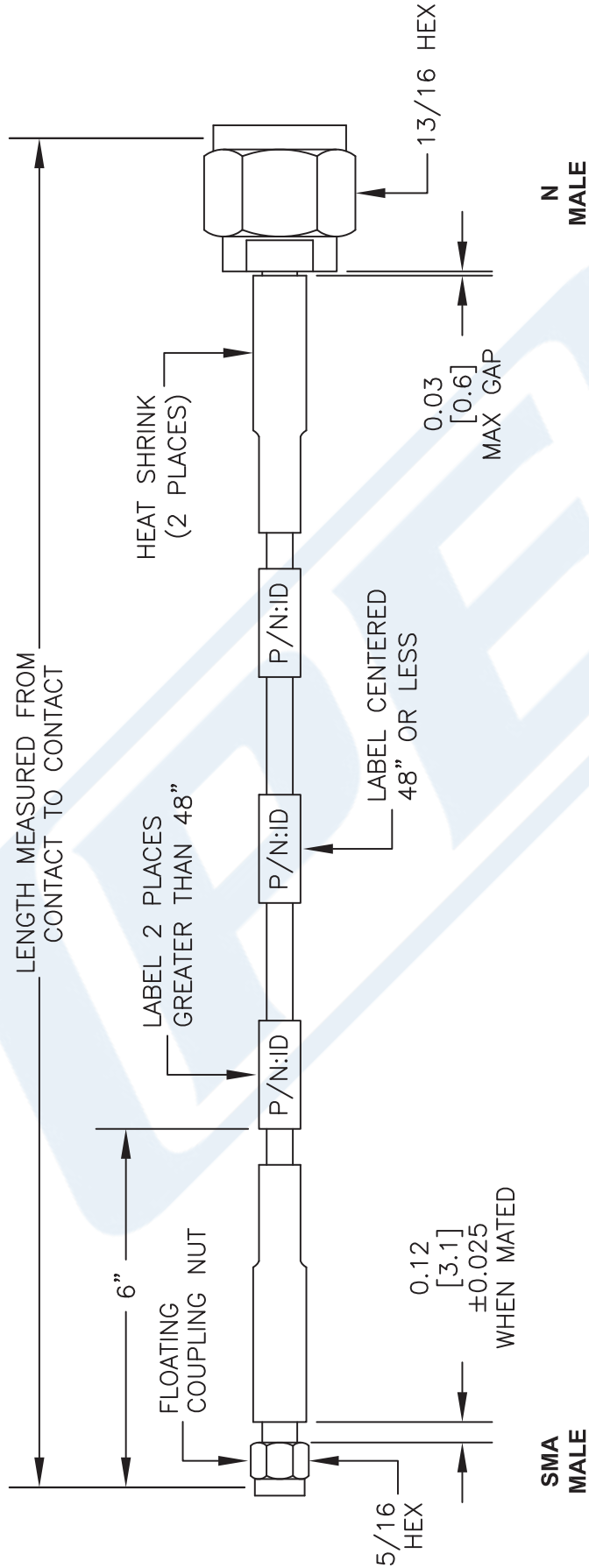
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.



# PE304-24 CAD Drawing

SMA Male to N Male Cable 24 Inch Length Using 160 Series  
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**STANDARD TOLERANCES**

.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

**PE304**

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES (mm).

FSCM NO. 53919

CAD FILE 110816

SCALE N/A

SIZE A

41742