

## SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax



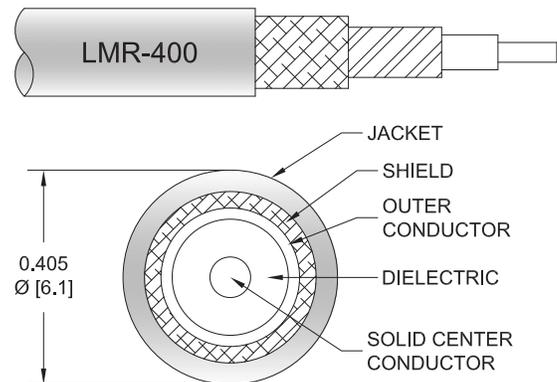
### PE3W20709

#### Configuration

- Connector 1: SMA Male Right Angle
- 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 PE3W20709 SMA male right angle 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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W20709 SMA male to type N male cable assembly operates to 6 GHz. The right angle SMA interface on the LMR-400 cable allows for easier connections in tight spaces. 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.

#### 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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax



**PE3W20709**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W20709	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3W20709-12	12 In	Insertion Loss (Typ.)	0.32	0.33	0.35	0.37	0.41	dB	0.189
PE3W20709-24	24 In	Insertion Loss (Typ.)	0.34	0.36	0.39	0.44	0.52	dB	0.256
PE3W20709-36	36 In	Insertion Loss (Typ.)	0.36	0.39	0.43	0.51	0.63	dB	0.323
PE3W20709-48	48 In	Insertion Loss (Typ.)	0.38	0.42	0.47	0.58	0.74	dB	0.39
PE3W20709-60	60 In	Insertion Loss (Typ.)	0.4	0.44	0.51	0.64	0.84	dB	0.457

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:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.189 pounds
Additional Weight per Inch:	0.00558 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.653 lbs [296.2 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]
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]

SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax



**PE3W20709**

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
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, Tri-Metal
Coupling Nut Material and Plating		Brass, Tri-Metal
Hex Size		18 mm

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

## SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax



### PE3W20709

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W20709**

**- xx**

**uu**

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

Length

Base Number

Example: PE3W20709-12 = 12 inches long cable  
PE3W20709-100cm = 100 cm long cable

SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax 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: [SMA Male Right Angle to N Male Low Loss Cable Using LMR®-400 Coax PE3W20709](#)

URL: <https://www.pasternack.com/sma-male-right-angle-to-n-male-low-loss-cable-using-lmr-400-pe3w20709-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3W20709 CAD Drawing

SMA Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax

