

## SMA Male to SMA Male Right Angle Precision Cable 48 Inch Length Using 160 Series Coax, LF Solder



### PE301-48

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: 160 Series
- Coax Flex Type: Flexible

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 69.5% Phase Velocity
- Triple Shielded
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE301-48 SMA male to SMA male right angle 48 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible 160 series coax. The PE301-48 SMA male to SMA male cable assembly operates to 18 GHz. The right angle SMA interface on the 160 series cable allows for easier connections in tight spaces. The triple 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		18	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	90			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			1,900	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz

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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Insertion Loss (Max.)	1.34	1.7	2.34	3.42	4.82	dB

#### Electrical Specification Notes:

Short lengths up to 24" long may exhibit VSWR measurements up to 9% higher.

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.17 in [4.32 mm]
Weight	0.15 lbs [68.04 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	3
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Mylar Tape
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.163 in [4.14 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
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 in.	5/16 in.
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm

#### Environmental Specifications

Operating Range Temperature	-50 to +205 deg C
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**Compliance Certifications** (see [product page](#) for current document)

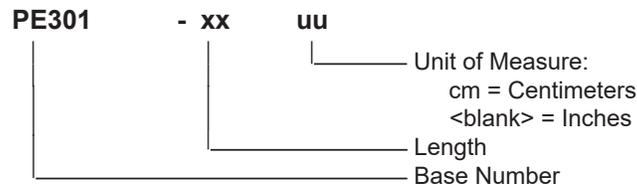
#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

#### Typical Performance Data

#### How to Order

Part Number Configuration:



Example: PE301-12 = 12 inches long cable  
PE301-100cm = 100 cm long cable

SMA Male to SMA Male Right Angle Precision Cable 48 Inch Length Using 160 Series Coax, 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.

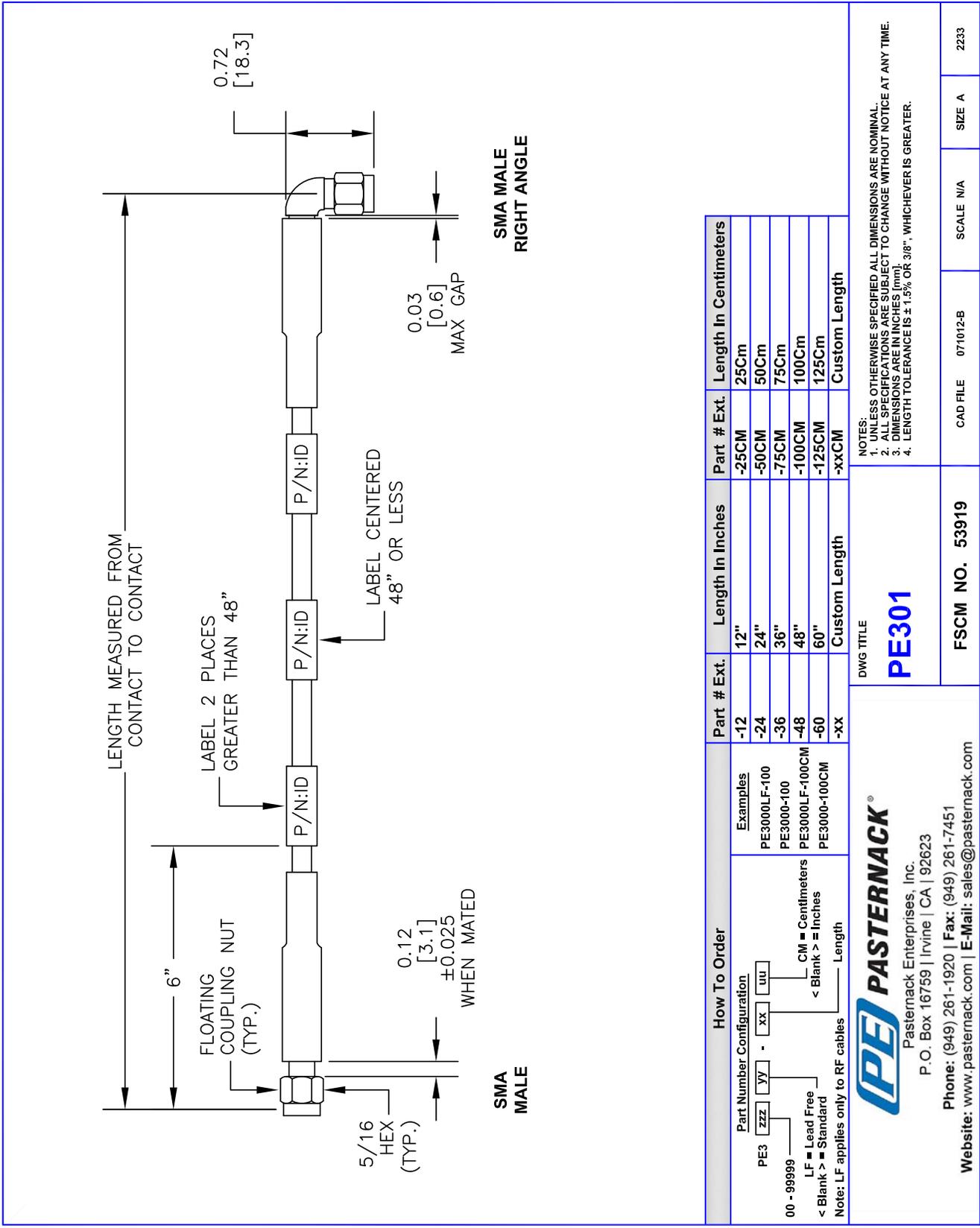
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Right Angle Precision Cable 48 Inch Length Using 160 Series Coax, LF Solder PE301-48](#)

URL: <https://www.pasternack.com/sma-male-sma-male-160-series-cable-assembly-pe301-48-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.

# PE301-48 CAD Drawing

SMA Male to SMA Male Right Angle Precision Cable 48 Inch Length Using 160 Series Coax, LF Solder



How To Order		Part # Ext.	Length In Inches	Part # Ext.	Length In Centimeters
Part Number Configuration		-12	12"	-25CM	25Cm
PE3	[ZZ] [YY] - [XX] [UU]	-24	24"	-50CM	50Cm
00 - 99999	[LF] = Lead Free < Blank > = Standard	-36	36"	-75CM	75Cm
	[CM] = Centimeters < Blank > = Inches	-48	48"	-100CM	100Cm
	Note: LF applies only to RF cables	-60	60"	-125CM	125Cm
		-XX	Custom Length	-XXCM	Custom Length

**PE PASTERNAK®**  
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DWG TITLE  
**PE301**

FSCM NO. 53919

CAD FILE 071012-B

SCALE N/A

SIZE A

2233

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].  
 4. LENGTH TOLERANCE IS ±1.5% OR .38", WHICHEVER IS GREATER.