



## SMA Male to SMA Male Cable 48 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder

### RF Cable Assemblies Technical Data Sheet

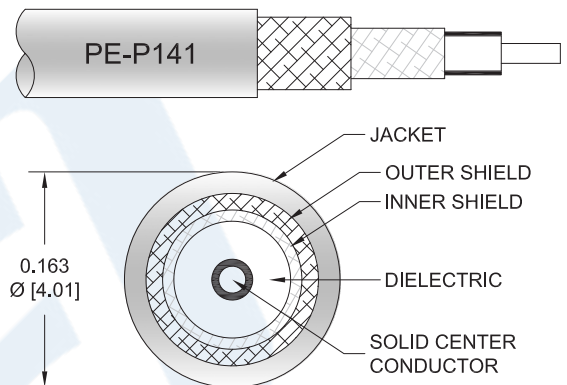
PE300-48

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-P141

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket
- 160 series, PE-P141 Spiral Strip flexible coax



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE300-48 SMA male to SMA male 48 inch cable using PE-P141 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 PE-P141 coax. The PE300-48 SMA male to SMA 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.

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 Cable 48 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-48](#)



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#### 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]

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	10	18	GHz
Insertion Loss (Typ.)	0.44	0.8	1.04	1.6	2.32	dB

#### Electrical Specification Notes:

Insertion loss does not include the loss of the connectors.

Insertion loss is estimated as  $0.05 \times \sqrt{f(\text{GHz})}$  dB per connector.

Short lengths up to 24" 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*	48 in [121.92 cm]
Weight	0.159 lbs [72.12 g]

##### Cable

Cable Type	PE-P141
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	SMA 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	5/16 inch
Torque	8 in-lbs [0.9 Nm]	8 in-lbs [0.9 Nm]

Mechanical Specification Notes:

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

**Environmental Specifications**

**Temperature**

Operating Range -55 to +125 deg C

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

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

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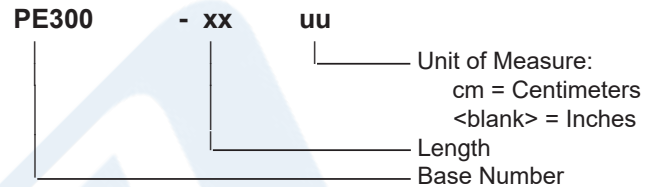
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#### How to Order

Part Number Configuration:



Example: PE300-12 = 12 inches long cable  
PE300-100cm = 100 cm long cable

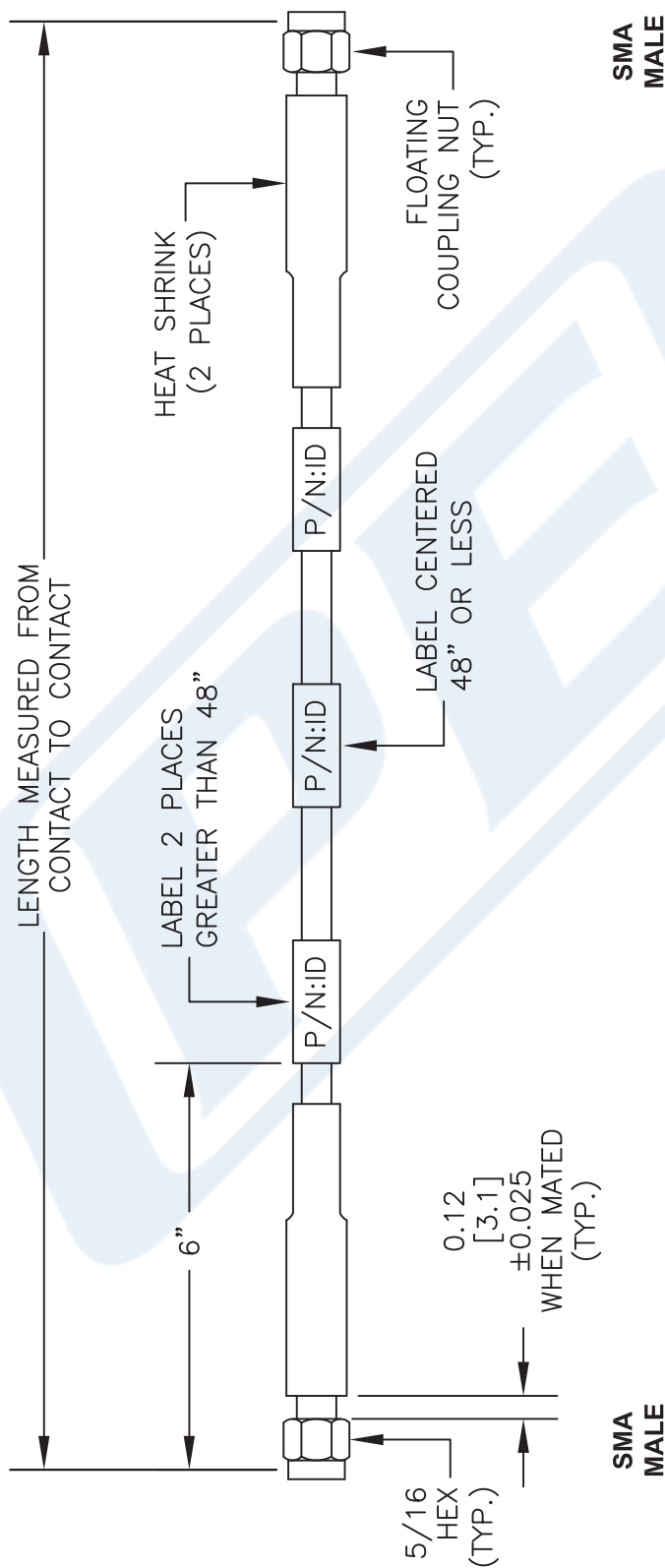
SMA Male to SMA Male Cable 48 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 Cable 48 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-48](https://www.pasternack.com/sma-male-sma-male-pe-p141-cable-assembly-pe300-48-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.

**PE300-48 CAD Drawing**  
 SMA Male to SMA Male Cable 48 Inch Length Using PE-  
 P141 Coax with HeatShrink, LF Solder



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.1
.XXX	±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**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].

DWG TITLE  
**PE300**

FSCM NO. 53919

CAD FILE 110816

SCALE N/A

SIZE A 41742

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