



PE300-72

## **RF Cable Assemblies Technical Data Sheet**

#### Configuration Connector 1: SMA Male Connector 2: SMA Male PE-P141 • Cable Type: PE-P141 JACKET Features OUTER SHIELD • Max Frequency 18 GHz **INNER SHIELD** • Shielding Effectivity > 110 dB 70% Phase Velocity 0.163 • Double Shielded DIELECTRIC Ø [4.01] • FEP Jacket • 160 series, PE-P141 Spiral Strip flexible coax SOLID CENTER CONDUCTOR **Applications** · General Purpose Laboratory Use

#### Description

Pasternack's PE300-72 SMA male to SMA male 72 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 PE300-72 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 72 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-72

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

Sales@Pasternack.com + Techsupport@Pasternack.com





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#### **Electrical Specifications**

Description	า	Minimu	m	Typical	Maximum	Units
Frequency Range		DC			18	GHz
VSWR					1.35:1	
Velocity of Propagation				70		%
RF Shielding		110				dB
Capacitance			2	9.4 [96.46]		pF/ft [pF/m]
Specifications by Fre	equency					
Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	10	18	GHz
Insertion Loss (Typ.)	0.66	1.2	1.56	2.4	3.48	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 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\*

Weight

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter 72 in [182.88 cm] 0.216 lbs [97.98 g]

PE-P141 50 Ohms Solid Copper Clad Steel, Silver PTFE 2 Silver Plated Copper Tape Silver Plated Copper Braid FEP, Blue 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 SMA Male	
Туре	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 ± 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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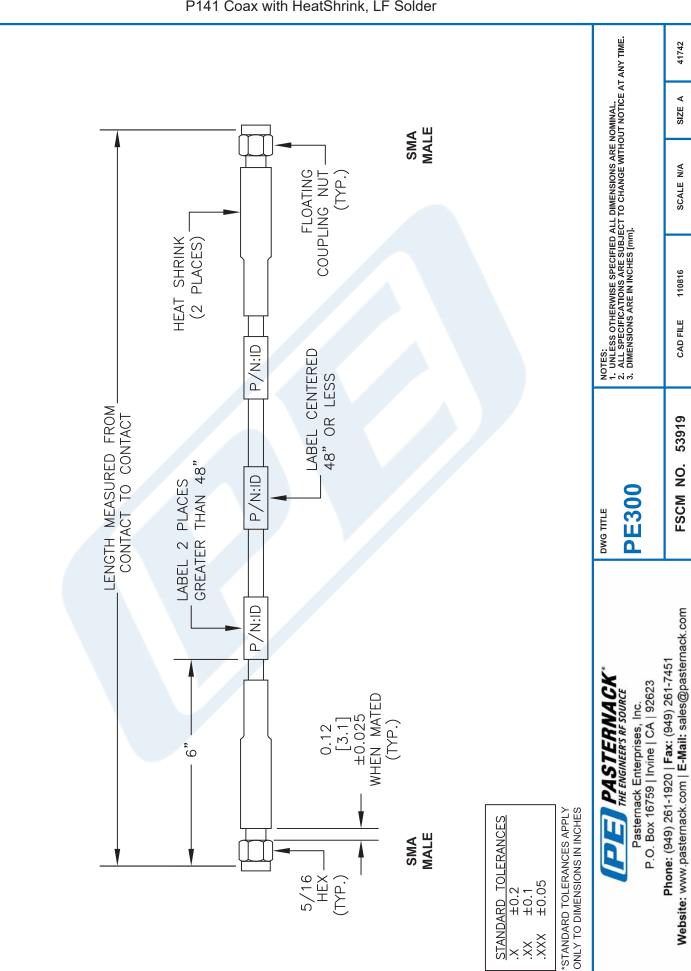
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## How to Order **PE300** Part Number Configuration: - XX uu Unit of Measure: cm = Centimeters <blank> = Inches Length **Base Number** Example: PE300-12 = 12 inches long cable PE300-100cm = 100 cm long cable SMA Male to SMA Male Cable 72 Inch Length 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 72 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-72 URL: https://www.pasternack.com/sma-male-sma-male-pe-p141-cable-assembly-pe300-72-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.

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P141 Coax with HeatShrink, LF Solder