



SMA Male to SMA Male Cable 120 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder

RF Cable Assemblies Technical Data Sheet

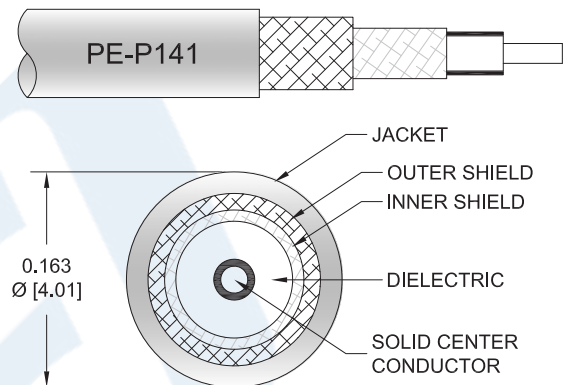
PE300-120

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 PE300-120 SMA male to SMA male 120 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 PE300-120 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 120 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-120](#)



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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.) | 1.1 | 2 | 2.6 | 4 | 5.8 | 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* | 120 in [304.8 cm] |
| Weight | 0.319 lbs [144.7 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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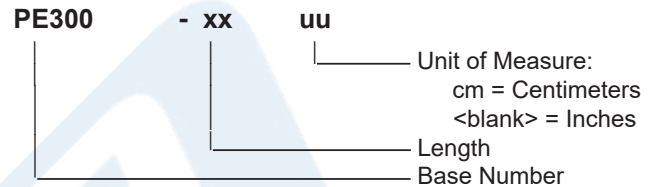
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How to Order

Part Number Configuration:



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

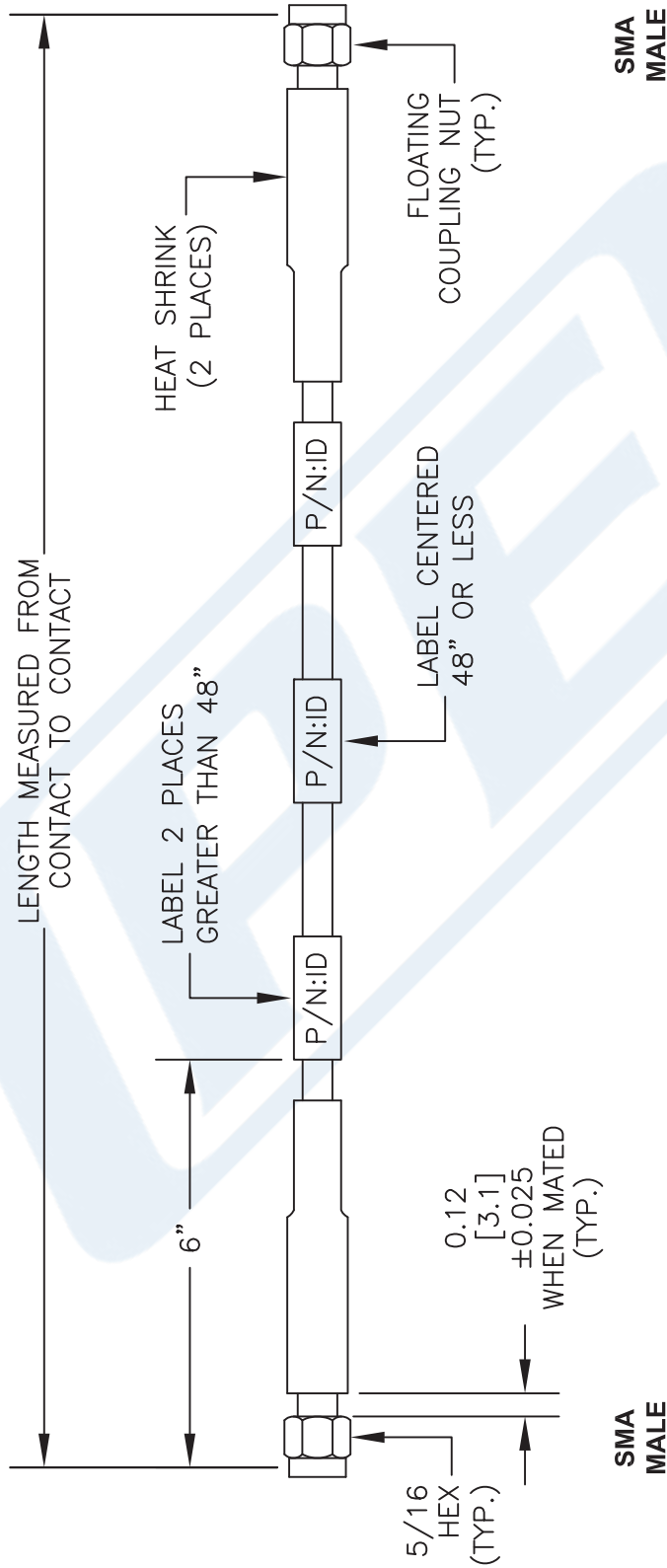
SMA Male to SMA Male Cable 120 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the 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 120 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE300-120](https://www.pasternack.com/sma-male-sma-male-pe-p141-cable-assembly-pe300-120-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.

PE300-120 CAD Drawing
 SMA Male to SMA Male Cable 120 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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