



SMA Male to SMA Male Cable 50 cm Length Using PE-P141 Coax with HeatShrink, LF Solder, RoHS

RF Cable Assemblies Technical Data Sheet

PE350-50CM

Configuration

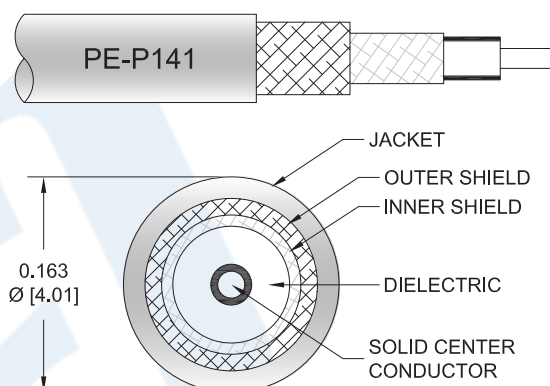
- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-P141

Features

- Highly durable flexible cable design with a VoP of 70%
- Thick wall SMA male connectors perform to 26.5 GHz
- Type N connectors perform to 18 GHz
- Electrical performance is equivalent to that of a solid wall 141 semi-rigid assembly
- Shielding effectiveness in excess of 100 dB
- Operating temperature range of -55 to +125°C
- RoHS Compliant
- Custom lengths built same-day
- 100% Continuity, Hi-Pot, and RF Tested

Applications

- General Purpose
- Laboratory Use



Description

PE-P141 high performance coax assemblies are cost effective designs, ideal for production test environments where rugged flexible cable assemblies are required. This series includes 26.5 GHz stainless steel SMA male connectors with a thick wall outer conductor designed to extend the life of the cable assemblies. A heavy-duty boot provides improved strain relief and adds to the durability of the cable assemblies. 18 GHz stainless steel type N male connectors with hex/knurl coupling nuts are also available. These cable assemblies are built using double-shielded flexible cable providing excellent shielding greater than 100 dB. All PE-P141 test cables are 100% continuity, Hi-Pot, and RF tested to the published specifications. Custom lengths are built to order and shipped the same day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 26.5 | GHz |
| VSWR | | | 1.45:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 110 | | | dB |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

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 50 cm Length Using PE-P141 Coax with HeatShrink, LF Solder, RoHS PE350-50CM](#)



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Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|--------|--------|--------|--------|--------|-------|
| Frequency | 3 | 5 | 10 | 18 | 26.5 | GHz |
| Insertion Loss (Typ.) | 0.33 | 0.43 | 0.66 | 0.96 | 1.24 | dB |
| VSWR (Max.) | 1.35:1 | 1.35:1 | 1.35:1 | 1.35:1 | 1.45:1 | |

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 12" 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* 19.685 in [500 mm]

Weight 0.13484 lbs [61.16 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]

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------|----------------------------|----------------------------|
| Type | SMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Body 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] |

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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.

How to Order

Part Number Configuration:

PE350

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE350-12 = 12 inches long cable
PE350-100cm = 100 cm long cable

SMA Male to SMA Male Cable 50 cm Length Using PE-P141 Coax with HeatShrink, LF Solder, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

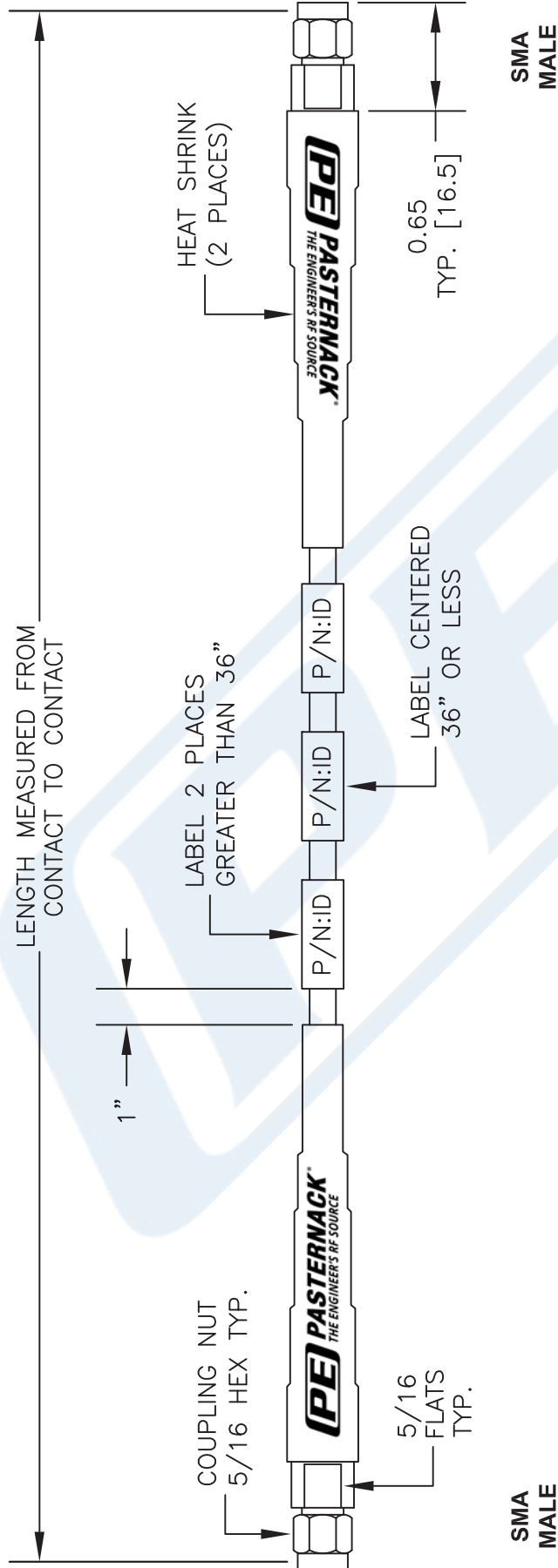
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URL: <https://www.pasternack.com/sma-male-sma-male-pe-p141-cable-assembly-pe350-50cm-p.aspx>

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.

PE350-50CM CAD Drawing

SMA Male to SMA Male Cable 50 cm Length Using PE-
P141 Coax with HeatShrink, LF Solder, RoHS



STANDARD TOLERANCES

.X ±0.2
.XX ±0.1
.XXX ±0.05

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE350

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].

FSCM NO. 53919

CAD FILE 110916

SCALE N/A

SIZE A

41742