



SMA Male Precision Connector Clamp/Solder Attachment for PE-P300LL, .490 inch Diameter Body

RF Connectors Technical Data Sheet

PE45042

Configuration

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- PE-P300LL Interface Type
- Clamp/Solder Attachment
- 5/16 Inch Hex
- Precision Design

Features

- Max. Operating Frequency 18 GHz
- Good VSWR of 1.4:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM-B488 50 µin

Applications

- General Purpose Test
- Precision Test & Measurement
- Custom Cable Assemblies

Description

Pasternack's PE45042 SMA male precision connector with clamp/solder attachment for PE-P300LL is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 18 GHz and offers good VSWR of 1.4:1.

Our SMA male connector PE45042 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | DC | | 18 | GHz |
| VSWR | | | 1.4:1 | |

Mechanical Specifications

| | |
|-------------|---------------------|
| Size | |
| Length | 1.61 in [40.89 mm] |
| Width/Dia. | 0.491 in [12.47 mm] |
| Weight | 0.044 lbs [19.96 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Clamp/Solder Attachment for PE-P300LL, .490 inch Diameter Body PE45042](#)



SMA Male Precision Connector Clamp/Solder Attachment for PE-P300LL, .490 inch Diameter Body

RF Connectors Technical Data Sheet

PE45042

Material Specifications

| Description | Material | Plating |
|--------------|----------------------------|--------------------------|
| Contact | Beryllium Copper | Gold ASTM-B488 50 µin |
| Insulation | PTFE | |
| Body | Passivated Stainless Steel | SAE-AMS-2700 |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700 |
| Gasket | Silicone Rubber | |

Environmental Specifications

Temperature

Operating Range -55 to +160 deg C

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

Plotted and Other Data

Notes:

SMA Male Precision Connector Clamp/Solder Attachment for PE-P300LL, .490 inch Diameter Body 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.

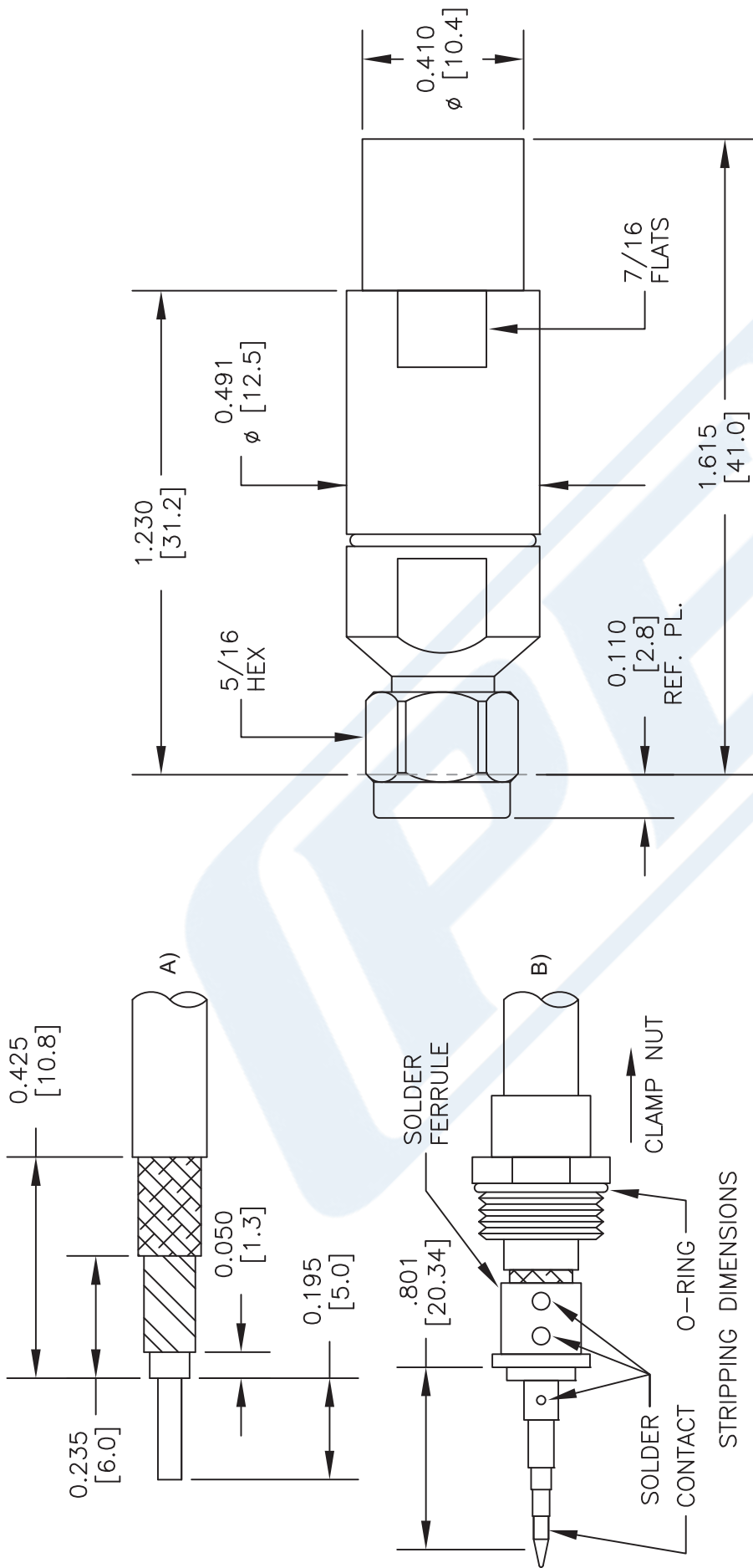
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Clamp/Solder Attachment for PE-P300LL, .490 inch Diameter Body PE45042](#)

URL: <https://www.pasternack.com/sma-male-pe-p300ll-connector-pe45042-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.

PE45042 CAD Drawing

SMA Male Precision Connector Clamp/Solder Attachment
for PE-P300LL, .490 inch Diameter Body



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. SLIDE CLAMP NUT OVER CABLE AS SHOWN IN (B). INSERT CABLE INTO SOLDER FERRULE UNTIL CABLE DIELECTRIC IS FLUSH WITH FACE OF FERRULE. THEN SOLDER BOTH CABLE BRAIDS WHERE SHOWN.
3. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.

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DWG TITLE
PE45042

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. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE 081814

SCALE N/A

SIZE A

2233



N Male Precision Connector Clamp/ Solder Attachment for PE-P300LL

RF Connectors Technical Data Sheet

PE44809

Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P300LL
- 3/4 inch Hex
- Precision Design

Features

- Max. Operating Frequency 18 GHz
- Excellent VSWR of 1.16:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Precision Test & Measurement
- Custom Cable Assemblies

Description

Pasternack's PE44809 type N male connector with clamp/solder attachment for PE-P300LL is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.16:1.

Our type N male connector PE44809 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | DC | | 18 | GHz |
| VSWR | | | 1.16:1 | |

Electrical Specification Notes:
Insertion loss: $0.04 \times \sqrt{f(\text{GHz})}$ dB max.
RF leakage: 90 dB min up to 1 GHz.

Mechanical Specifications

| | |
|---------------|-----------------------------------|
| Size | |
| Length | 1.74 in [44.2 mm] |
| Width/Dia. | 0.75 in [19.05 mm] |
| Weight | 0.104 lbs [47.17 g] |
| Mating Cycles | 500 Cycles |
| Mating Torque | 19 to 21 in-lbs [2.15 to 2.37 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Precision Connector Clamp/Solder Attachment for PE-P300LL PE44809](#)



N Male Precision Connector Clamp/ Solder Attachment for PE-P300LL

RF Connectors Technical Data Sheet

PE44809

Material Specifications

| Description | Material | Plating |
|--------------|----------------------------|------------------------------------|
| Contact | Beryllium Copper | Gold over Nickel 50 µin minimum |
| Insulation | PTFE | |
| Body | Passivated Stainless Steel | SAE-AMS-2700 |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700 |

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

Humidity

MIL-STD-202, Method 106, No Vibration

Shock

MIL-STD-202, Method 213, Condition I

Vibration

MIL-STD-202, Method 204, Condition D

Thermal Shock

MIL-STD-202, Method 107, Condition B

Salt Spray

MIL-STD-202, Method 101, Condition B (5%)

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

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Precision Connector Clamp/Solder Attachment for PE-P300LL PE44809](#)

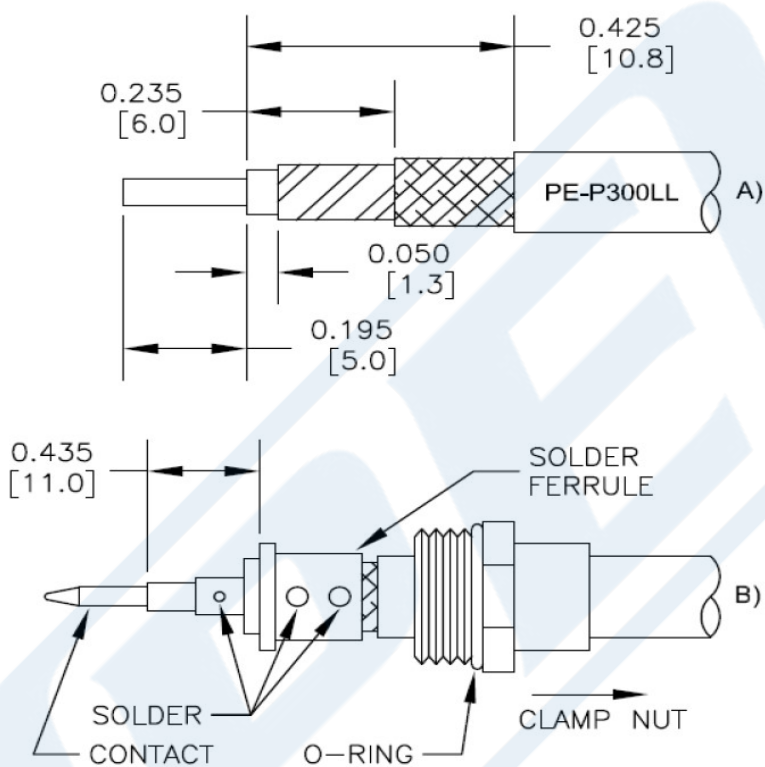


N Male Precision Connector Clamp/ Solder Attachment for PE-P300LL

RF Connectors Technical Data Sheet

PE44809

Assembly Instruction



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. SLIDE CLAMP NUT OVER CABLE AS SHOWN IN (B). INSERT CABLE INTO SOLDER FERRULE UNTIL CABLE DIELECTRIC IS FLUSH WITH FACE OF FERRULE. THEN SOLDER BOTH CABLE BRAIDS WHERE SHOWN.
3. SCREW ASSEMBLY INTO BODY & TIGHTEN CLAMP NUT TO 35-45 IN/LBS.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Precision Connector Clamp/Solder Attachment for PE-P300LL PE44809](#)



N Male Precision Connector Clamp/ Solder Attachment for PE-P300LL

RF Connectors Technical Data Sheet

PE44809

N Male Precision Connector Clamp/Solder Attachment for PE-P300LL 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: [N Male Precision Connector Clamp/Solder Attachment for PE-P300LL PE44809](#)

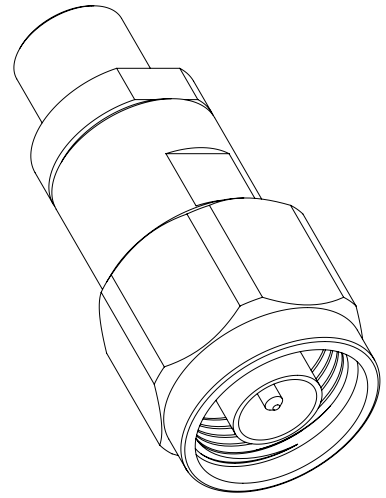
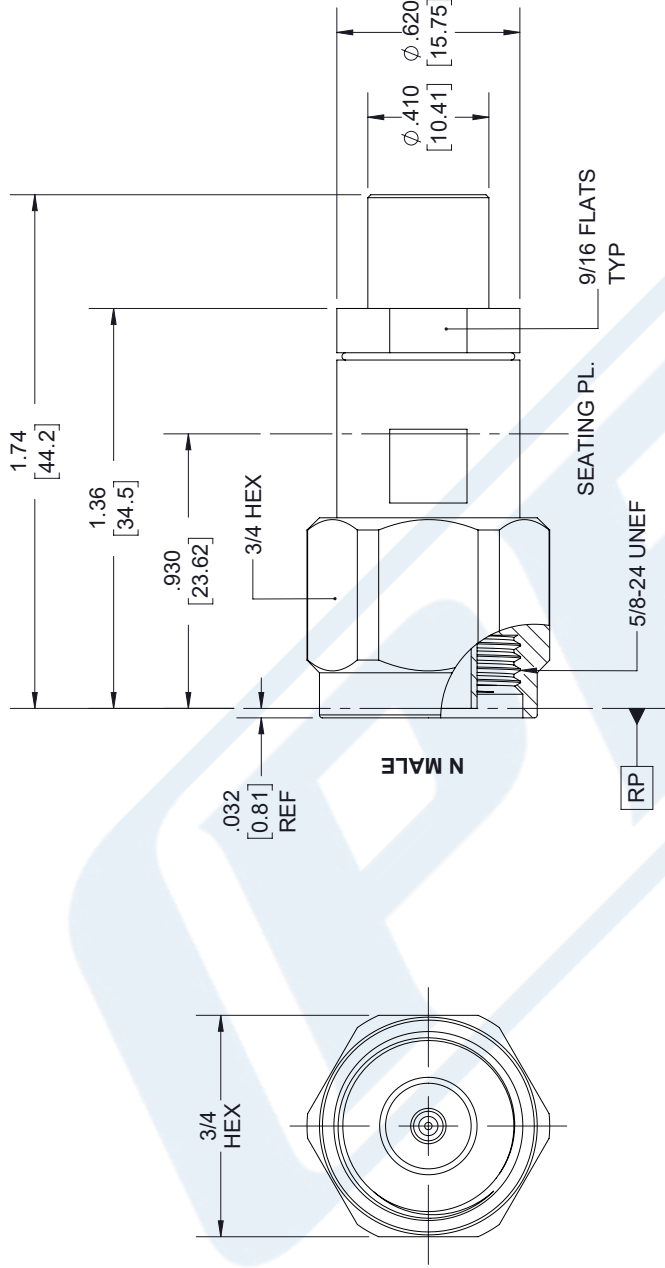
URL: <https://www.pasternack.com/n-male-pe-p300ll-connector-pe44809-p.aspx>

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PE44809 CAD Drawing

N Male Precision Connector Clamp/Solder Attachment for PE-P300LL

| REVISIONS | | | |
|-----------|-------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | PCR PE44809 | 7/13/2020 | SELLIS |



| | | |
|--|--|-------------------------|
| <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> | | <p>SHEET 1 OF 2</p> |
| <p>SCALE N/A</p> | | <p>REV A</p> |
| <p>PE PASTERNAK an INFINITI brand</p> <p>Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p> | | <p>ITEM NO. PE44809</p> |
| <p>SIZE A</p> | | <p>DRAWN BY K.Dang</p> |
| <p>CAGE CODE 53919</p> | | <p>REV A</p> |

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | | |
|---------------|-------|-------------|
| .X = ± .2 | [.08] | FRACTIONS |
| .XX = ± .02 | [.51] | ± 1/32 |
| .XXX = ± .005 | [.13] | ANGLES ± 1° |

CABLE LENGTH (L) TOLERANCES:

| | | |
|-----------------------------|------------|------|
| L ≤ 12 [305] | ± .1 [25] | / -0 |
| 12 [305] < L ≤ 60 [1524] | ± .2 [51] | / -0 |
| 60 [1524] < L ≤ 120 [3048] | ± .4 [102] | / -0 |
| 120 [3048] < L ≤ 300 [7620] | ± .6 [152] | / -0 |
| 300 [7620] < L | ± .5% L | / -0 |

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket

RF Cables Technical Data Sheet

PE-P300LL

Configuration

- Low Loss Flexible Cable
- 3 Shield(s)

Features

- Low Loss dielectric 83% VoP
- Phase stable Expanded PTFE dielectric
- Double Shielded with metalized polyimide interlayer
- Shielding >95dB
- FEP Jacket

Applications

- Low Loss system cables
- Rugged environments
- Test systems with long cable runs
- ATE, Automated Test Equipment
- Antenna Jumpers

Description

PE-P300LL low loss coaxial cable with flat strip foil braid is part of our full line of RF components available for same-day shipping from Pasternack. The PE-P300LL coaxial cable features a low loss dielectric with an 83% velocity of propagation (VoP). These low loss coax features combine to make Pasternack's cable well suited for applications that require a high-performance RF cable. Applications for coax with low loss include long cable lengths where the attenuation from standard solid dielectric coax would impact system performance.

The 0.300 inch diameter coax has a durable FEP outer jacket that makes this cable appropriate for a wide range of indoor or outdoor applications. The flat foil braid provides superior shielding and the expanded PTFE dielectric contributes to the lower attenuation and improves the power handling of this coax cable.

Our datasheet specifications and drawing with dimensions for The PE-P300LL coax cable are shown below in this PDF. In addition to bulk RF cable, Pasternack offers cable assemblies using PE-P300LL with a wide selection of connector options available. See our web site to find the right connector cable combination for your application.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range | DC | | 18 | GHz |
| Impedance | | 50 | | Ohms |
| Structural VSWR | | 1.35:1 | | |
| Velocity of Propagation | | 83 | | % |
| Nominal Capacitance | | 25 [82.02] | | 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: [Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket PE-P300LL](#)



Low Loss Flexible PE-P300LL Coax Cable

Triple Shielded with Green FEP Jacket

RF Cables

Technical Data Sheet

PE-P300LL

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|-------|-------|-------|-------|----------|
| Frequency | 0.4 | 1 | 2 | 2.4 | 3 | GHz |
| Attenuation, Max | 3.2 | 5.1 | 7.3 | 8 | 9 | dB/100ft |
| | 10.5 | 16.73 | 23.95 | 26.25 | 29.53 | dB/100m |
| Attenuation, Typ | 2.9 | 4.6 | 6.6 | 7.3 | 8.2 | dB/100ft |
| | 9.51 | 15.09 | 21.65 | 23.95 | 26.9 | dB/100m |
| Input Power (CW), Max | 2,750 | 1,700 | | | 950 | Watts |

| Description | F6 | F7 | F8 | F9 | F10 | Units |
|-----------------------|-------|-------|-------|----|-----|----------|
| Frequency | 5 | 10 | 18 | | | GHz |
| Attenuation, Max | 11.9 | 17.4 | 24.1 | | | dB/100ft |
| | 39.04 | 57.09 | 79.07 | | | dB/100m |
| Attenuation, Typ | 10.8 | 15.8 | 21.9 | | | dB/100ft |
| | 35.43 | 51.84 | 71.85 | | | dB/100m |
| Input Power (CW), Max | 730 | 500 | 345 | | | Watts |

Electrical Specification Notes:
 Power handling derates linearly to 0% from +25°C to +250°C.

Mechanical Specifications

| | |
|-----------------------------|--------------------------|
| Diameter | 0.3 in [7.62 mm] |
| Weight | 0.079 lbs/ft [0.12 Kg/m] |
| Min. Bend Radius (Repeated) | 1.5 in [38.1 mm] |

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|----------------------|------------------|
| Inner Conductor | Copper, Silver1 | 0.089 in 2.26 mm |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.25 in 6.35 mm |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket PE-P300LL](#)



Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket

RF Cables Technical Data Sheet

PE-P300LL

| | | |
|---------------|--|------------------|
| First Shield | Silver Plated Copper Tape 90% min. coverage | 0.255 in 6.48 mm |
| Second Shield | Aluminum Polyester | 0.261 in 6.63 mm |
| Third Shield | Silver Plated Copper Wire 90% min. coverage | 0.277 in 7.04 mm |
| Jacket | FEP, Green | 0.3 in [7.62 mm] |

Environmental Specifications

Temperature

Operating Range

-55 to +200 deg C

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

Plotted and Other Data

Notes:

Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket 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.

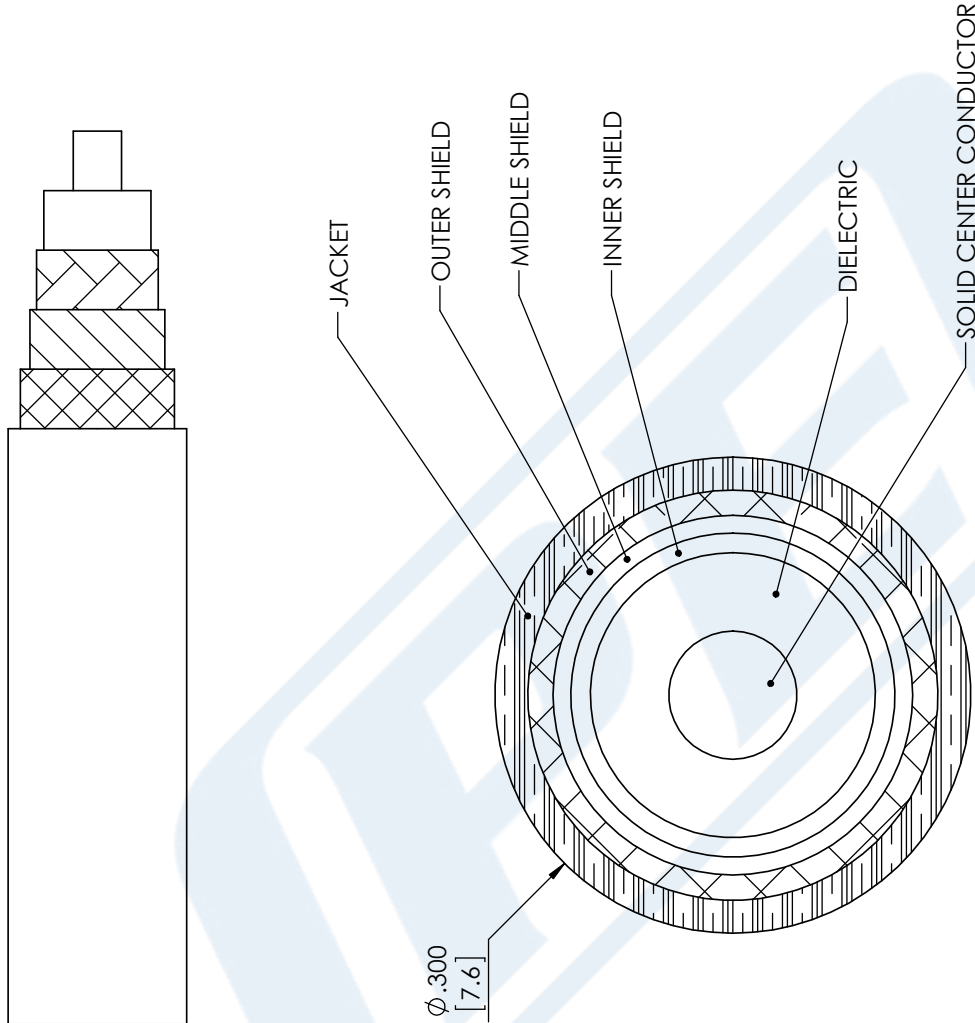
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URL: <https://www.pasternack.com/50ohm-low-loss-flexible-pe-p300ll-coax-cable-triple-shielded-fep-jacket-p.aspx>

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PE-P300LL CAD Drawing

Low Loss Flexible PE-P300LL Coax Cable Triple Shielded with Green FEP Jacket



STANDARD TOLERANCES

| | |
|------|--------|
| .X | ±0.2 |
| .XX | ±0.01 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

[PE] PASTERNAK®
THE ENGINEER'S RF SOURCE

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DWG TITLE

PE-P300LL

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].

CAGE CODE 53919

CAD FILE 11/28/17

SCALE N/A

SIZE A

CN2245