PASTERNACK®
THE ENGINEER'S RF SOURCE

# TNC Male Precision Connector Clamp/ Solder Attachment for PE-P142LL

## RF Connectors Technical Data Sheet PE44815

### Configuration

- TNC Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- PE-P142LL Interface Type
- Clamp/Solder Attachment
- 9/16 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 PE44815 TNC male precision connector with clamp/solder attachment for PE-P142LL is part of our full line of RF components available for same-day shipping. Our TNC male connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.16:1.

Our TNC male connector PE44815 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 | |
| Insertion Loss | | | 0.22 | dB |
| Operating Voltage (AC) | | | 500 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 1,500 | Vrms |
| High Potential Voltage 5 to 7.5 MHz | | | 1,000 | Vrms |
| Corona Discharge at 70,000 ft | | | 375 | Vrms |
| Insulation Resistance | 5,000 | | | MOhms |
| RF Leakage | 90 | | | dB |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: TNC Male Precision Connector Clamp/Solder Attachment for PE-P142LL PE44815

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
**Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
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# TNC Male Precision Connector Clamp/ Solder Attachment for PE-P142LL



### Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency Range | DC to 12.4 | 12.4 to 18 | | | | GHz |
| VSWR, Max | 1.14:1 | 1.16:1 | | | | |

Electrical Specification Notes:
Insertion loss: 0.05 x sqrt(fGHz) dB max.

## Mechanical Specifications

### Size

| | |
|---|---|
| Length | 1.27 in [32.26 mm] |
| Width/Dia. | 0.625 in [15.88 mm] |
| Weight | 0.041 lbs [18.6 g] |
| Mating Torque | 12 to 15 in-lbs [1.36 to 1.70 Nm] |

### Material Specifications

| Description | Material | Plating |
|---|---|---|
| Contact | Beryllium Copper | Gold over Nickel 50 µin minimum |
| Insulation | PEI | |
| 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 |

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## RF Connectors Technical Data Sheet PE44815

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data**

Notes:

TNC Male Precision Connector Clamp/Solder Attachment for PE-P142LL 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/tnc-male-pe-p142ll-connector-pe44815-p.aspx



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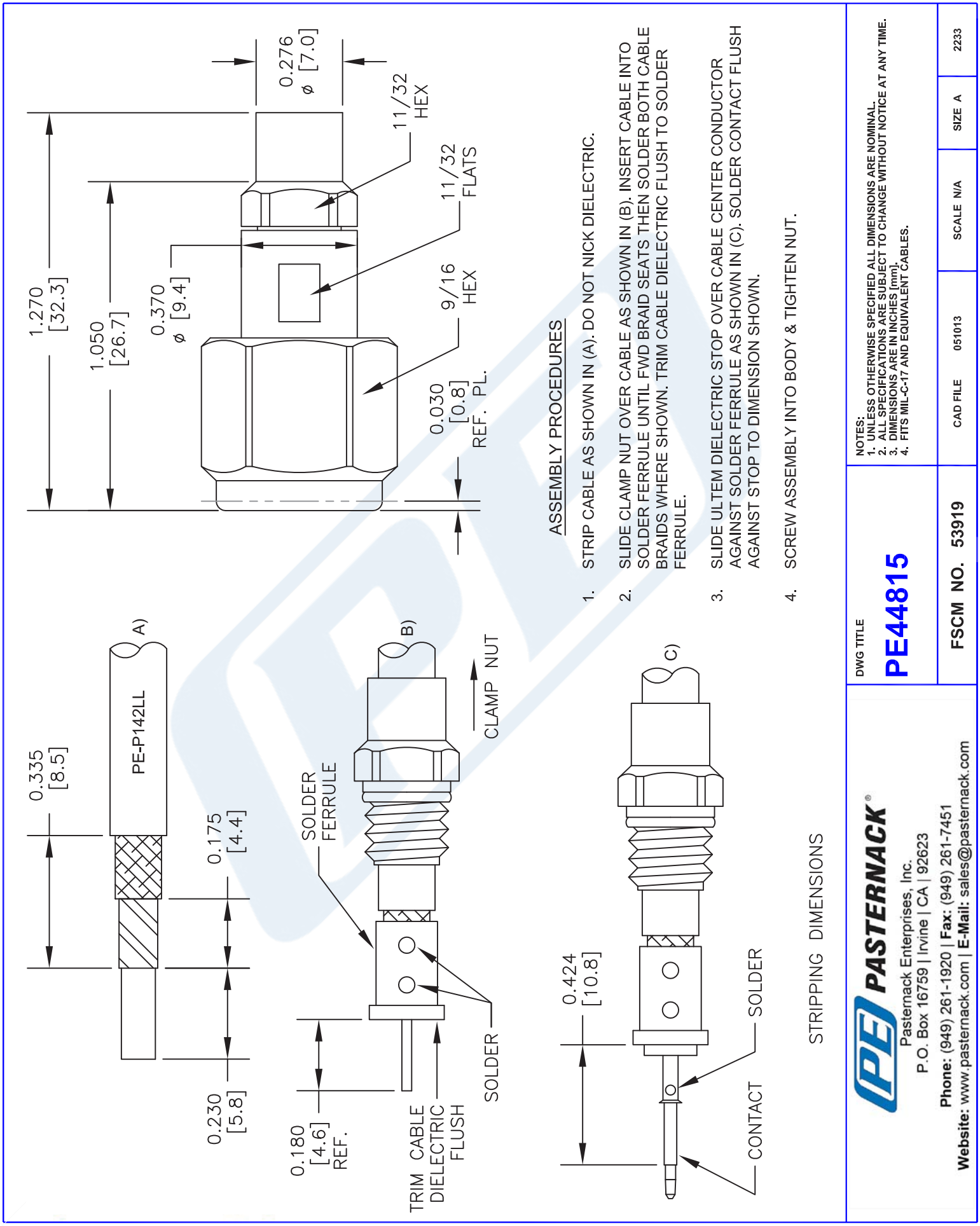
# PE44815 CAD Drawing

TNC Male Precision Connector Clamp/Solder Attachment for PE-P142LL



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## RF Connectors Technical Data Sheet PE44815

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# PE44815 CAD Drawing

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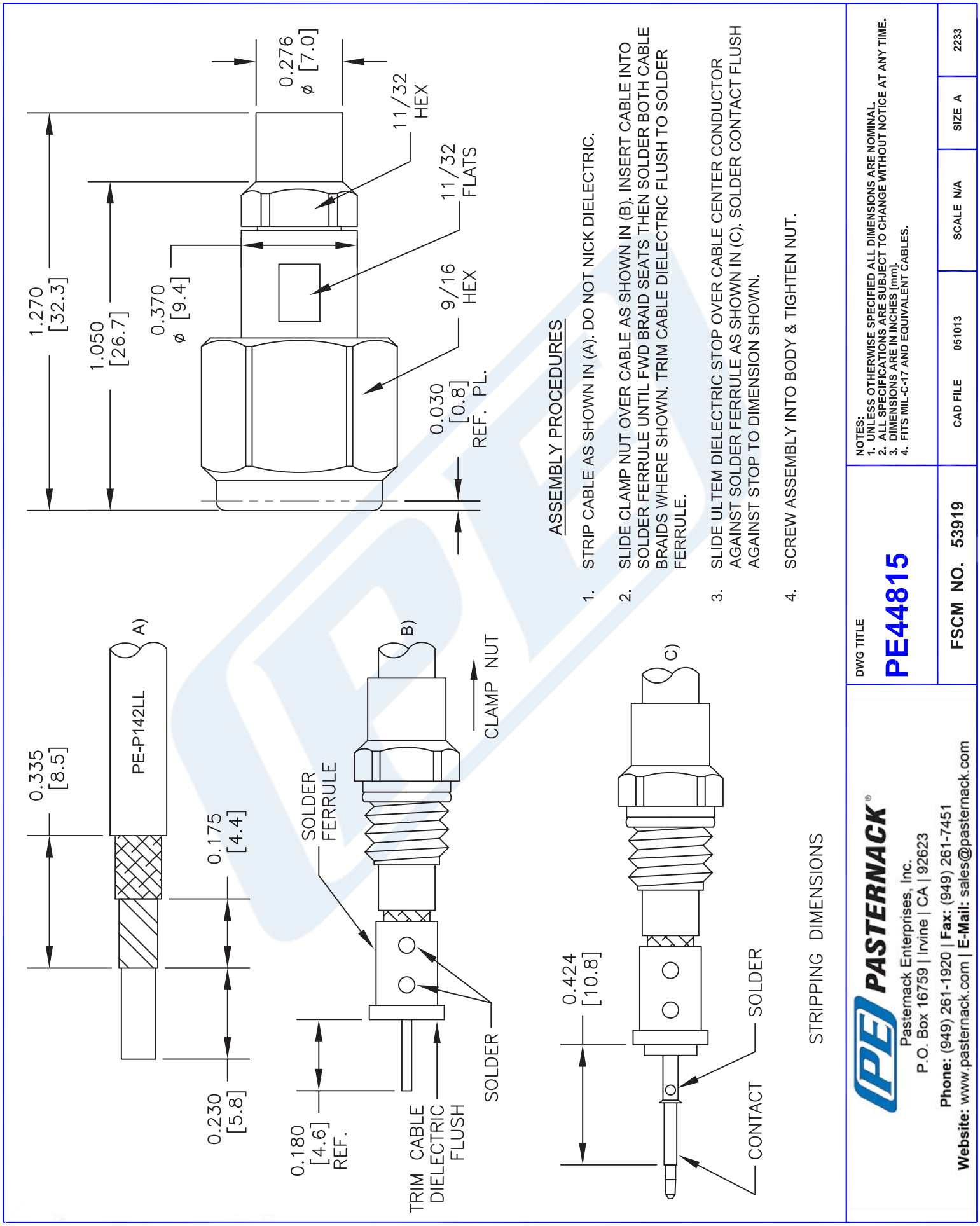

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# Low Loss Flexible PE-P142LL Coax Cable Triple Shielded with Green FEP Jacket

RF Cables
Technical Data Sheet

PE-P142LL

## Configuration

- Low Loss Flexible Cable
- 3 Shield(s)

## Features

- Low Loss dielectric 80% 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-P142LL 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-P142LL coaxial cable features a low loss dielectric with an 80% 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 0.195 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-P142LL coax cable are shown below in this PDF. In addition to bulk RF cable, Pasternack offers cable assemblies using PE-P142LL 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 | | 80 | | % |
| 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-P142LL Coax Cable Triple Shielded with Green FEP Jacket PE-P142LL

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# Low Loss Flexible PE-P142LL Coax Cable Triple Shielded with Green FEP Jacket

## RF Cables
## Technical Data Sheet

PE-P142LL

### Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 0.4 | 1 | 2 | 2.4 | 3 | GHz |
| Attenuation, Max | 5.2 | 8.2 | 11.8 | 12.9 | 14.5 | dB/100ft |
| | 17.06 | 26.9 | 38.71 | 42.32 | 47.57 | dB/100m |
| Attenuation, Typ | 4.7 | 7.5 | 10.7 | 11.7 | 13.2 | dB/100ft |
| | 15.42 | 24.61 | 35.1 | 38.39 | 43.31 | dB/100m |
| Input Power (CW), Max | 1,310 | 820 | | | 460 | Watts |

| Description | F6 | F7 | F8 | F9 | F10 | Units |
|---|---|---|---|---|---|---|
| Frequency | 5 | 10 | 18 | | | GHz |
| Attenuation, Max | 18.9 | 27.4 | 37.6 | | | dB/100ft |
| | 62.01 | 89.9 | 123.36 | | | dB/100m |
| Attenuation, Typ | 17.2 | 24.9 | 34.2 | | | dB/100ft |
| | 56.43 | 81.69 | 112.2 | | | dB/100m |
| Input Power (CW), Max | 350 | 240 | 170 | | | Watts |

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

### Mechanical Specifications

| | |
|---|---|
| Diameter | 0.195 in [4.95 mm] |
| Weight | 0.037 lbs/ft [0.06 Kg/m] |
| Min. Bend Radius (Repeated) | 0.975 in [24.77 mm] |

### Construction Specifications

| Description | Material and Plating | Diameter |
|---|---|---|
| Inner Conductor | Copper, Silver1 | 0.051 in 1.3 mm |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.145 in 3.68 mm |

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# Low Loss Flexible PE-P142LL Coax Cable Triple Shielded with Green FEP Jacket



| | | |
|---|---|---|
| First Shield | Silver Plated Copper Tape<br>90% min. coverage | 0.152 in 3.86 mm |
| Second Shield | Aluminum Polyester | 0.158 in 4.01 mm |
| Third Shield | Silver Plated Copper Wire<br>90% min. coverage | 0.178 in 4.52 mm |
| Jacket | FEP, Green | 0.195 in [4.95 mm] |

## Environmental Specifications

**Temperature**

Operating Range -55 to +200 deg C

**Compliance Certifications** (see product page for current document)

## Plotted and Other Data

Notes:

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URL: https://www.pasternack.com/50ohm-low-loss-flexible-pe-p142ll-coax-cable-triple-shielded-fep-jacket-p.aspx



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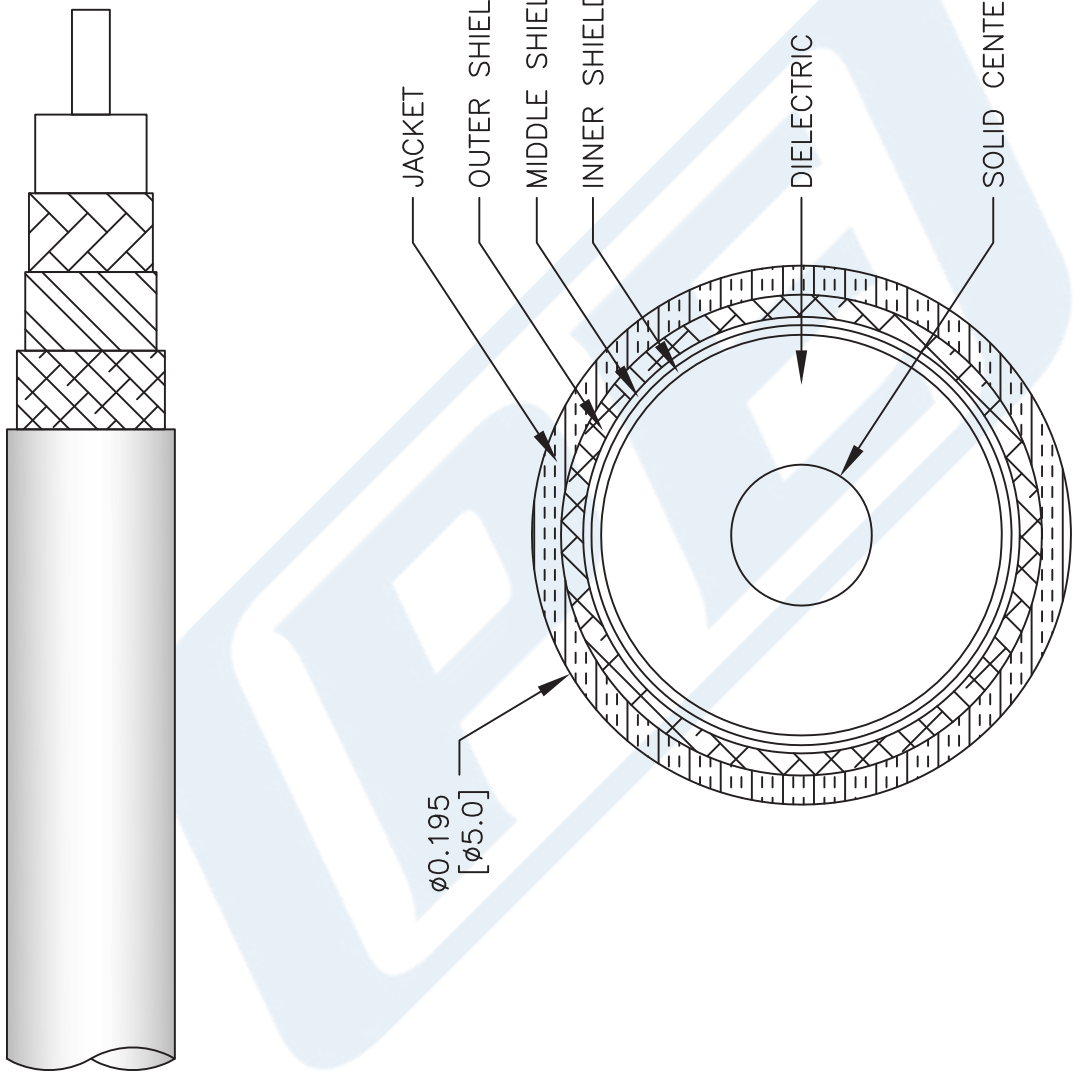
# PE-P142LL CAD Drawing

Low Loss Flexible PE-P142LL Coax Cable Triple Shielded with Green FEP Jacket




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
PE-P142LL

CAD FILE 062817 | SCALE N/A | SIZE A | 2233

CAGE CODE 53919

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