



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 μ m 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](#)



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

RF Connectors Technical Data Sheet

PE44815

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: $0.05 \times \sqrt{f(\text{GHz})}$ 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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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](#)



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

RF Connectors Technical Data Sheet

PE44815

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

Plotted and Other Data

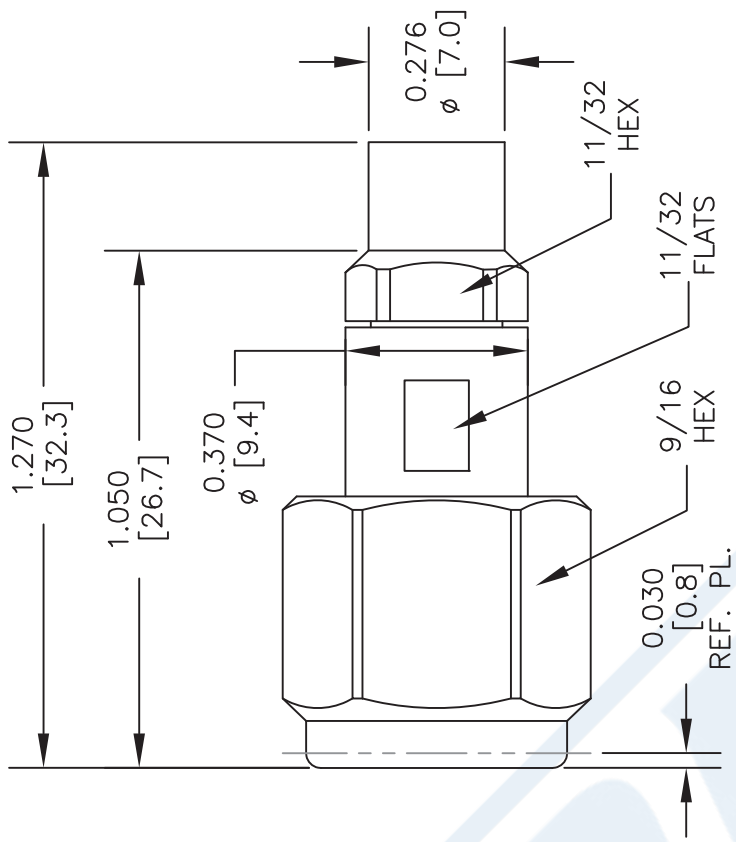
Notes:

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.

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](#)

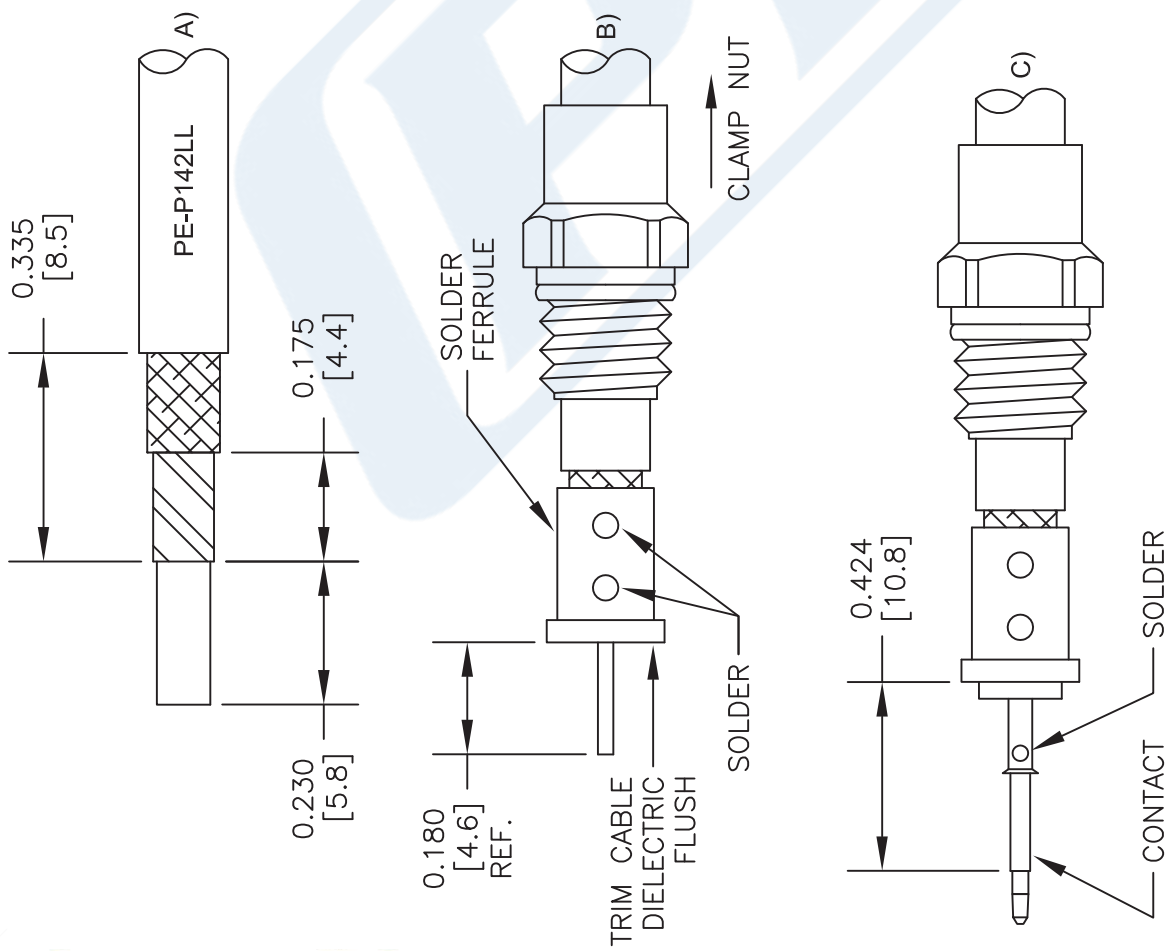
URL: <https://www.pasternack.com/tnc-male-pe-p142ll-connector-pe44815-p.aspx>

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.



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 FWD BRAID SEATS THEN SOLDER BOTH CABLE BRAIDS WHERE SHOWN. TRIM CABLE DIELECTRIC FLUSH TO SOLDER FERRULE.
3. SLIDE ULTEM DIELECTRIC STOP OVER CABLE CENTER CONDUCTOR AGAINST SOLDER FERRULE AS SHOWN IN (C). SOLDER CONTACT FLUSH AGAINST STOP TO DIMENSION SHOWN.
4. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.



STRIPPING DIMENSIONS



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DWG TITLE

PE44815

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 051013

SCALE N/A

SIZE A

2233

TNC Female Bulkhead Mount Precision Connector Clamp/Solder Attachment for PE-P142LL



PE44811

Configuration

- TNC Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P142LL
- Bulkhead
- 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
- Rack and Panel Mount Applications
- Precision Test & Measurement
- Custom Cable Assemblies

Description

Pasternack's PE44811 , TNC, Precision, Connector is part of our full line of RF components available for same-day shipping. Our TNC female connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.16:1. This TNC bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our TNC female bulkhead connector PE44811 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	
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
Impedance		50		Ohms

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				

TNC Female Bulkhead Mount Precision Connector Clamp/Solder Attachment for PE-P142LL



PE44811

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

Mechanical Specifications

Size	
Length	1.36 in [34.54 mm]
Width	0.625 in [15.88 mm]
Weight	0.035 lbs [15.88 g]

Material Specifications

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

Environmental Specifications

Temperature	
Operating Range	-65 to +165 deg C

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

Plotted and Other Data

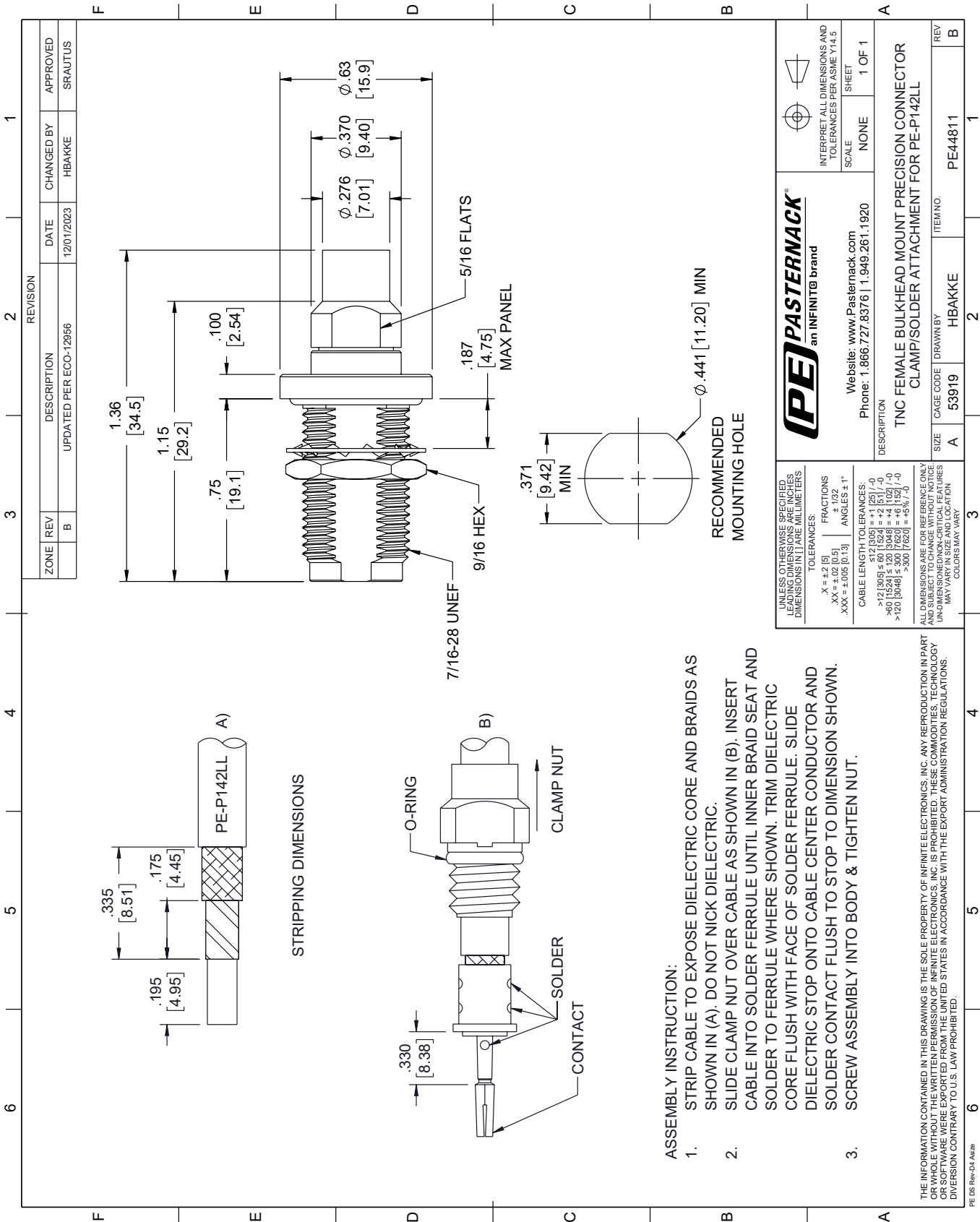
Notes:

TNC Female Bulkhead Mount 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 99.4% 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: [TNC Female Bulkhead Mount Precision Connector Clamp/Solder Attachment for PE-P142LL PE44811](#)

URL: <https://www.pasternack.com/tnc-female-pe-p142ll-connector-pe44811-p.aspx>

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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](#)



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

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](#)



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

RF Cables Technical Data Sheet

PE-P142LL

First Shield	Silver Plated Copper Tape 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 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:

Low Loss Flexible PE-P142LL 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.

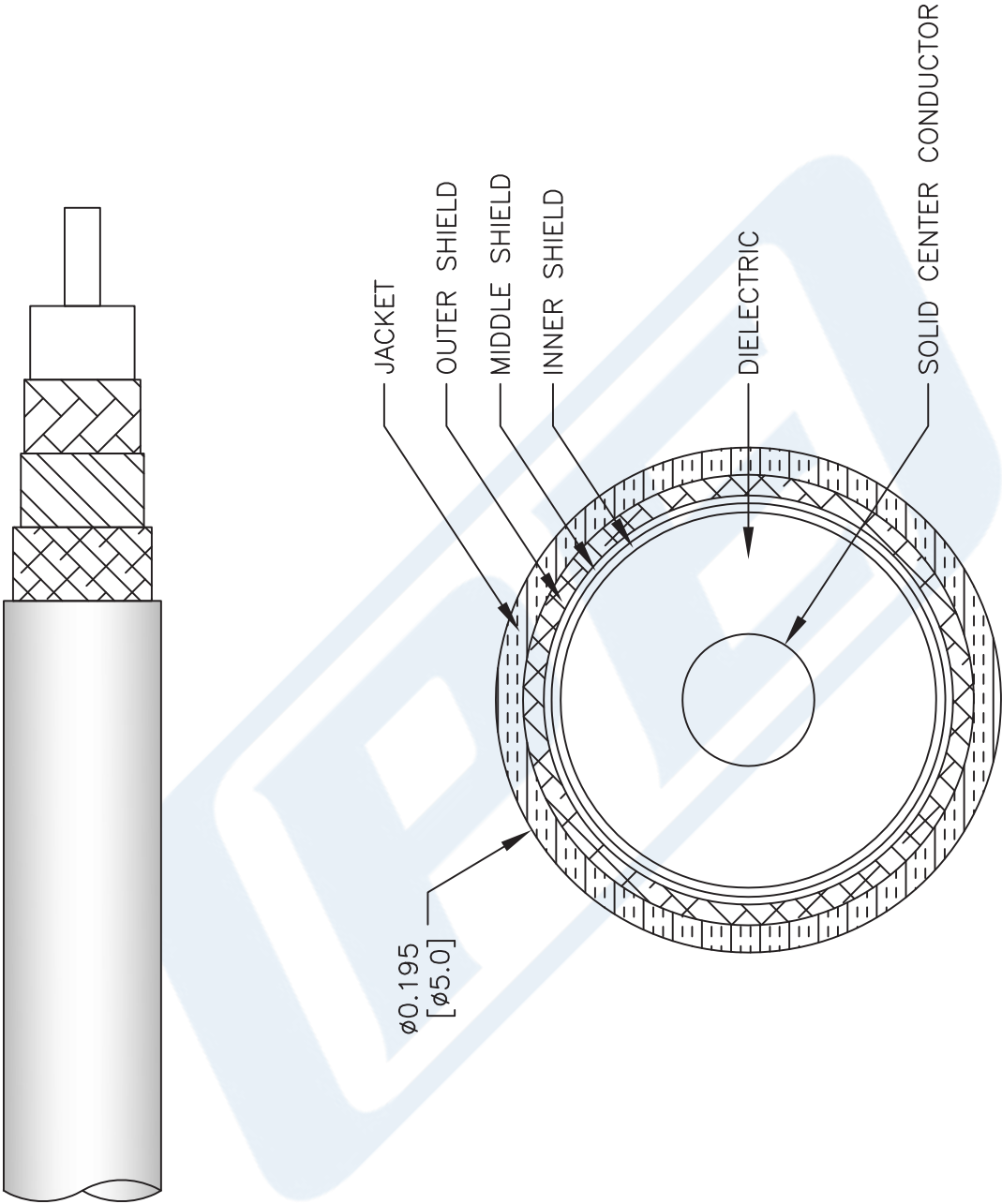
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible PE-P142LL Coax Cable Triple Shielded with Green FEP Jacket PE-P142LL](#)

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



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DWG TITLE
PE-P142LL

CAGE CODE 53919

CAD FILE 062817

SCALE N/A

SIZE A

2233

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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