



BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316

RF Connectors Technical Data Sheet

PE1948

Configuration

- BNC Female Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG174, RG188, RG316
- Bulkhead

Features

- Max. Operating Frequency 4 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel over Copper Plated Phosphor Bronze

- Contact
- Hermetically Sealed

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE1948, BNC, Standard, Connector is part of our full line of RF components available for same-day shipping. Our BNC female connector operates up to a maximum frequency of 4 GHz and offers excellent VSWR of 1.2:1. This BNC 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 BNC female bulkhead connector PE1948 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 | | 4 | GHz |
| VSWR | | | 1.2:1 | |
| Insertion Loss | | 0.2 | | dB |
| Operating Voltage (AC) | | | 500 | Vrms |
| Impedance | 50 | | | Ohms |
| Dielectric Withstanding Voltage (AC) | | | 1,500 | Vrms |
| Inner Conductor DC Resistance | | 1.5 | | mOhms |
| Outer Conductor DC Resistance | | 1 | | mOhms |
| Insulation Resistance | 5,000 | | | MOhms |

Mechanical Specifications

Size

Length

1.19 in [30.23 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 PE1948](#)



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| | |
|-----------------------|-------------------------------------|
| Width | 0.69 in [17.53 mm] |
| Height | 0.69 in [17.53 mm] |
| Weight | 0.06 lbs [27.22 g] |
| Mating Cycles | 500 Cycles |
| Mating Torque | 0.6 to 2.5 in-lbs [0.07 to 0.28 Nm] |
| Cable Retention Force | 6.1 lbs 2.77 kg |

Material Specifications

| Description | Material | Plating |
|--------------|-----------------|------------------------------|
| Contact | Phosphor Bronze | Gold over Nickel over Copper |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal over Copper |
| Coupling Nut | Brass | Tri-Metal over Copper |
| Gasket | Silicone | |
| Washer | Brass | Tri-Metal over Copper |

Environmental Specifications

Temperature

| | |
|-----------------|-------------------------------------|
| Operating Range | -65 to +165 deg C |
| Humidity | MIL-STD-202, Method106 |
| Thermal Shock | MIL-STD-202, Method107, Condition B |
| Salt Spray | MIL-STD-202, Method101, Condition B |
| Hermetic Seal | 1*10-6cc/sec helium at 1atm |

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

Plotted and Other Data

Notes:

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RF Connectors Technical Data Sheet

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BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 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.

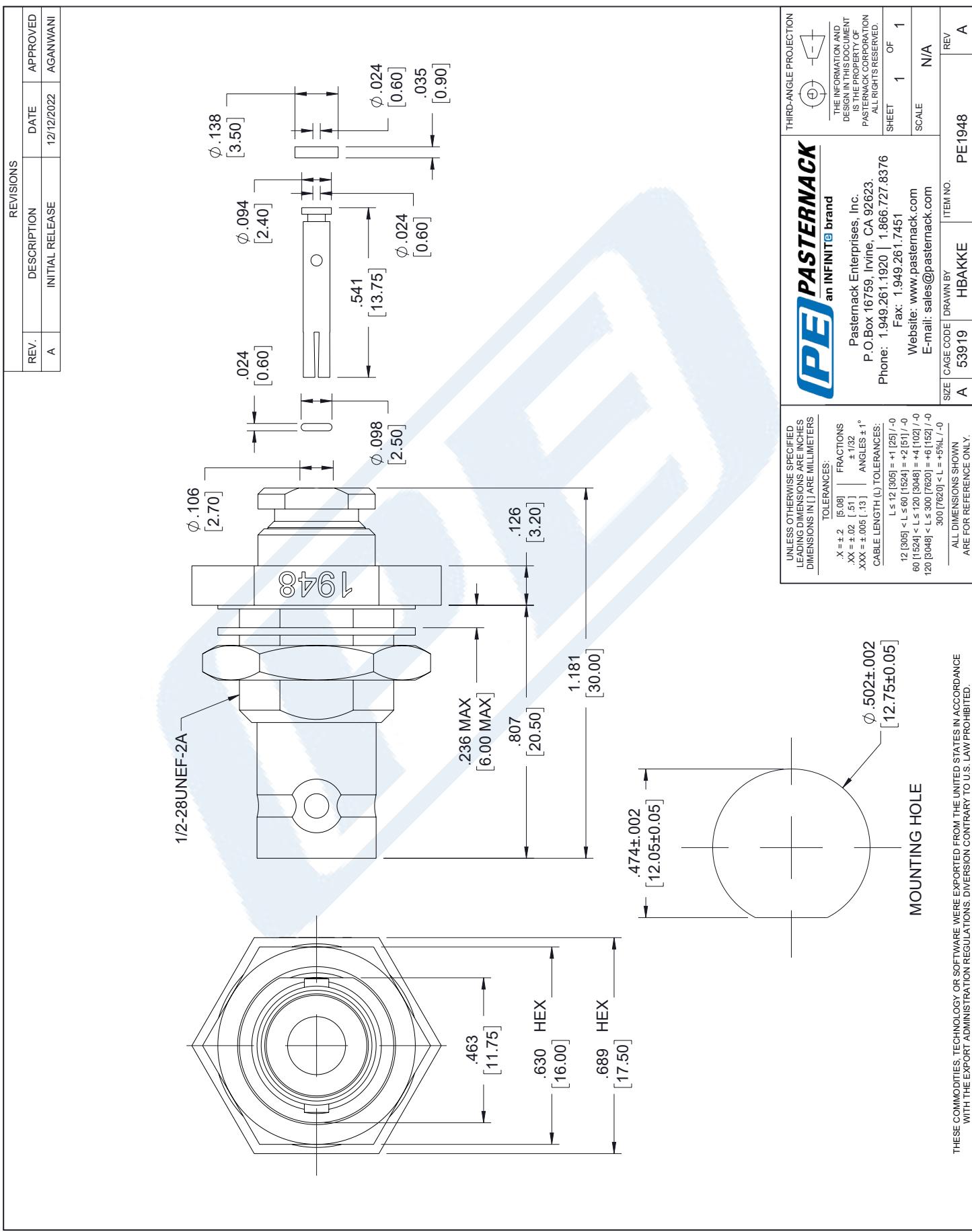
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 PE1948](#)

URL: <https://www.pasternack.com/bnc-female-rg174-rg188-rg316-connector-pe1948-p.aspx>

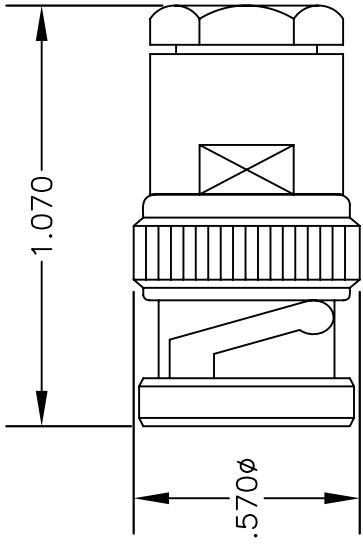
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE1948 CAD Drawing

BNC Female Bulkhead Mount Hermetically Sealed Connector
Clamp/Solder Attachment for RG174, RG188, RG316



| MATERIALS | |
|----------------|---------------------|
| BODY | BRASS NICKEL PLATED |
| CONTACT | GOLD PLATED |
| INSULATOR | PTFE |
| SOLDER ADAPTER | BRASS GOLD PLATED |



ASSEMBLY PROCEDURES

ASSEMBLY (A)

1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN IN ASSEMBLY (A). DO NOT CUT DIELECTRIC.

2. SLIDE ADAPTER (4) OVER CABLE UNTIL ADAPTER (4) BOTTOMS ON OUTER CONDUCTOR. SOLDER ADAPTER (4) TO OUTER CONDUCTOR USING MINIMUM HEAT.

3. STRIP CABLE AS SHOWN IN ASSEMBLY (B). SOLDER CONTACT TO CENTER CONDUCTOR. SLIDE ASSEMBLY FORWARD & TIGHTEN TO BODY.

ASSEMBLY (B)

PASTERNACK ENTERPRISES, INC.
P.O BOX 16759, IRVINE, CA 92623
PHONE (949) 261-1920 FAX (949) 261-7451
WEB ADDRESS: www.pasternack.com
E-MAIL ADDRESS: sales@pasternack.com

PASTERNACK ENTERPRISES®

ESTABLISHED 1972

DES. BNC MALE, SOLDERCLAMP ATTACHMENT
FOR RG402, PE-SR402AL & PE-SR402FL

DWG TITLE **PE4206** REV. - **F**SCM NO. **53919** CAD FILE **042309** SCALE **N/A** SIZE **A** **147**

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.

141 Semi-rigid Coax Cable with Tinned Aluminum

RF Cables Technical Data Sheet

PE-SR402AL

Configuration

- Semi-Rigid Cable
- 1 Shield(s)

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 36 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 69.5 | | % |
| Dielectric Withstanding Voltage (AC) | | | 5,000 | Vrms |

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|--------|--------|----|----|----------|
| Frequency | 1 | 10 | 20 | | | GHz |
| Attenuation, Max | 13 | 46 | 71 | | | dB/100ft |
| | 42.65 | 150.92 | 232.94 | | | dB/100m |
| Input Power (CW), Max | 450 | 120 | 70 | | | Watts |

Mechanical Specifications

Min. Bend Radius (Repeated) 0.15 in [3.81 mm]

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|-------------------------------------|------------------|
| Inner Conductor | Copper Clad Steel, Silver, 1 Strand | 0.036 in 0.91 mm |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.118 in [3 mm] |
| Outer Conductor | Tinned Aluminum | 0.141 in 3.58 mm |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [141 Semi-rigid Coax Cable with Tinned Aluminum PE-SR402AL](#)

141 Semi-rigid Coax Cable with Tinned Aluminum

RF Cables Technical Data Sheet

PE-SR402AL

Environmental Specifications

Temperature

Operating Range

-55 to +125 deg C

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

Plotted and Other Data

Notes:

141 Semi-rigid Coax Cable with Tinned Aluminum 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.

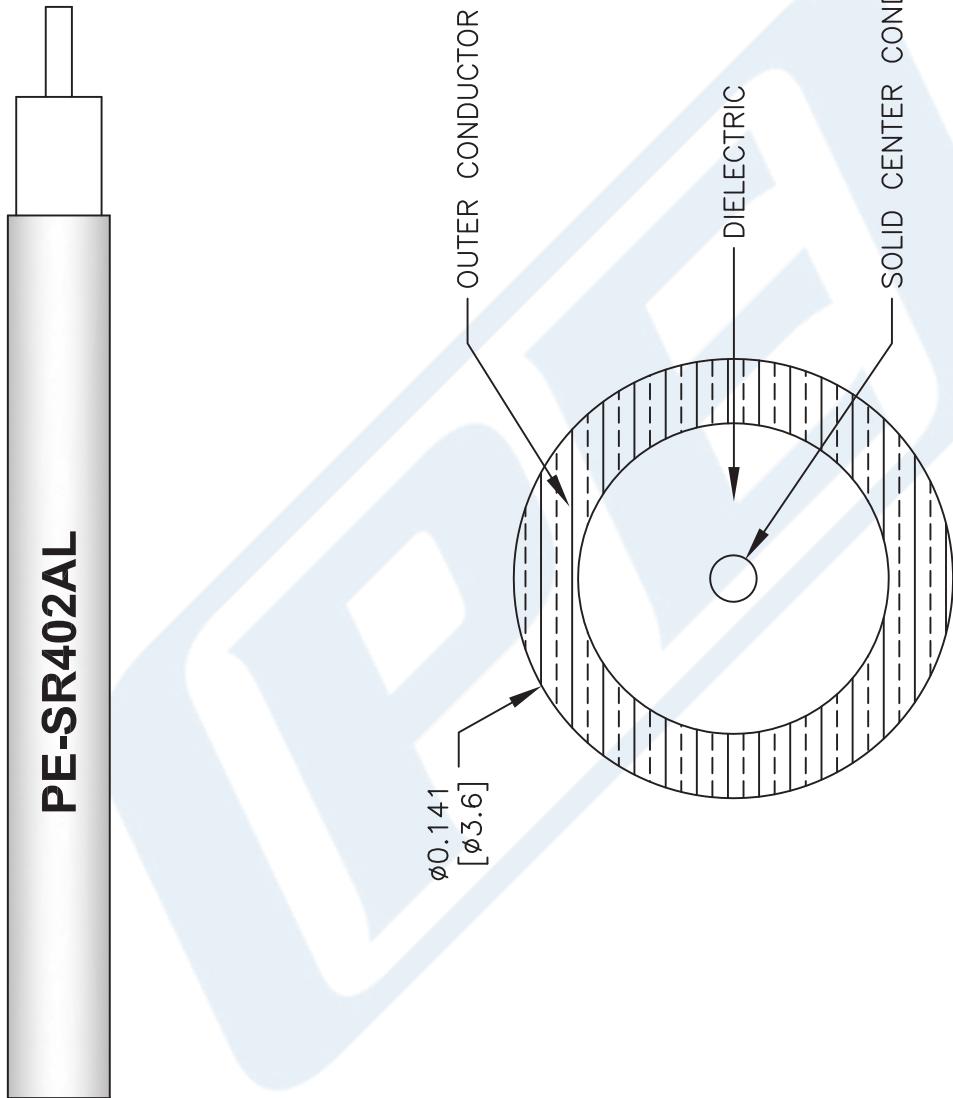
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URL: <https://www.pasternack.com/semirigid-0.141-50-ohm-coax-cable-tinned-aluminum-pe-sr402al-p.aspx>

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PE-SR402AL CAD Drawing

141 Semi-rigid Coax Cable with Tinned Aluminum



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3. DIMENSIONS ARE IN INCHES [mm].

| DWG TITLE | PE-SR402AL |
|----------------|--|
| FSCM NO. 53919 | CAD FILE 111716 SCALE N/A SIZE A 41742 |

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| PASTERNACK® THE ENGINEER'S RF SOURCE Paternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.paternack.com E-Mail: sales@paternack.com |
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