



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:

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](#)



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

RF Connectors Technical Data Sheet

PE1948

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.

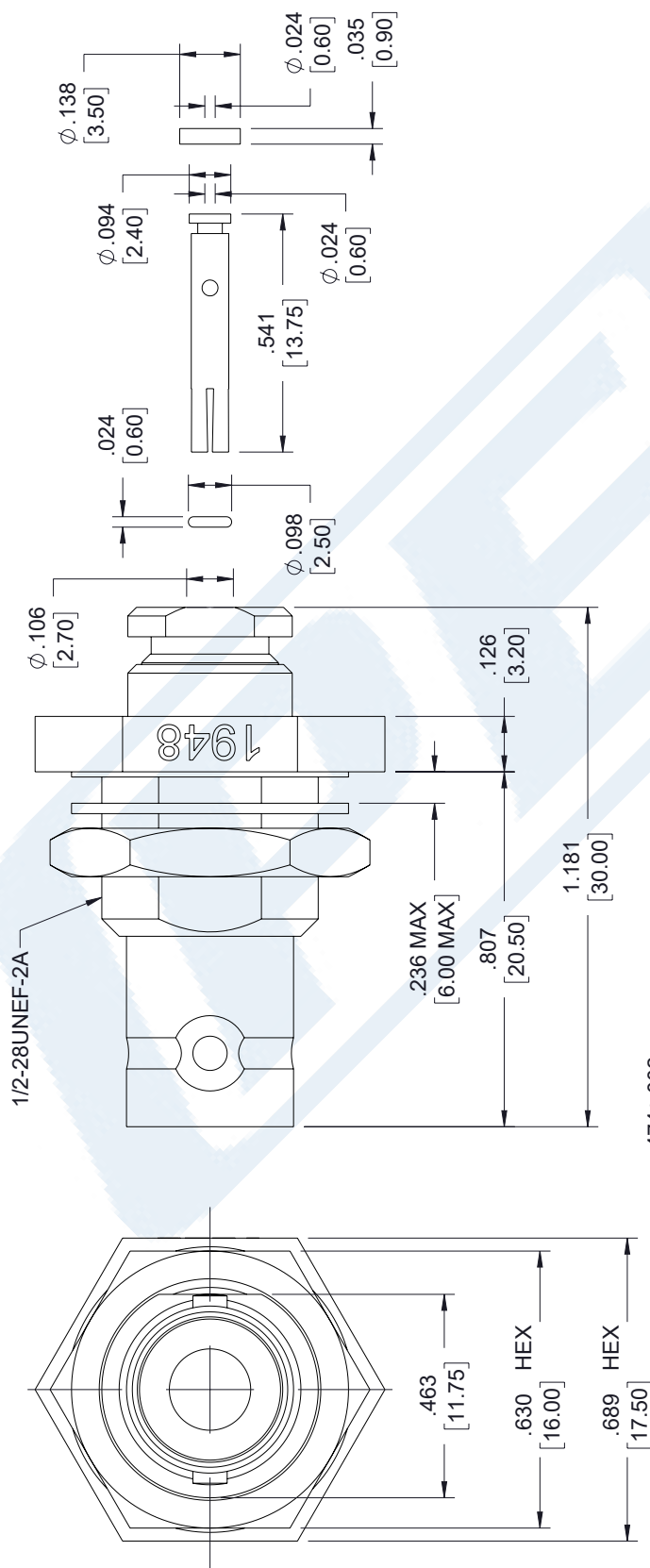
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 PE1948](https://www.pasternack.com/bnc-female-rg174-rg188-rg316-connector-pe1948-p.aspx)

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.

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12/12/2022	AGANWANI



Technical drawing of a circular mounting hole. The drawing shows a circle with a center cross. Dimensions are provided for the hole's size and position:

- Overall diameter: $\phi .502 \pm .002$ [12.75 \pm 0.05]
- Positional tolerance (from a reference point): $.474 \pm .002$ [12.05 \pm 0.05]
- Feature name: MOUNTING HOLE

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE



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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	HBAKKE	

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

TOLERANCES:

[5.08] | FRACTIONS

[.51]	$\pm 1/32$
[.13]	ANGLES $\pm 1^\circ$

LENGTH (L) TOLERANCES:

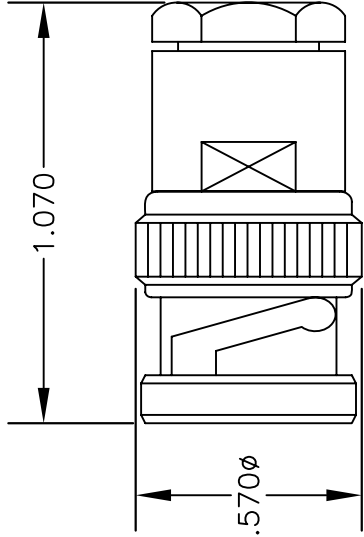
$$\frac{L \leq 12 \text{ [305]} = +1 \text{ [25]} / -0}{\text{---}}$$
$$L \leq 60 [1524] = +2 [51] / -0$$
$$\leq 120 [3048] = +4 [102] / -0$$
 $00[7620] < L = +5\%L / -0$

MENSIONS SHOWN

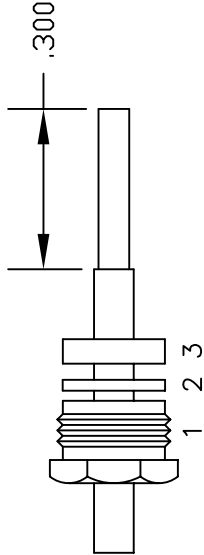
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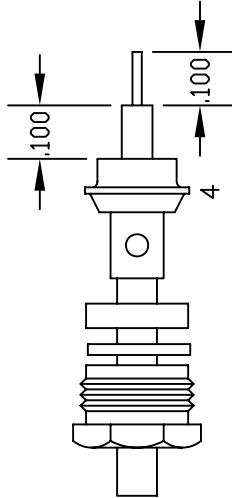
MATERIALS	
BODY	BRASS NICKEL PLATED
CONTACT	GOLD PLATED
INSULATOR	PTFE
SOLDER ADAPTER	BRASS GOLD PLATED



ASSEMBLY PROCEDURES



ASSEMBLY (A)



ASSEMBLY (B)

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.



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COAXIAL & FIBER OPTICS

DWG TITLE DES. BNC MALE, SOLDER/CLAMP ATTACHMENT FOR RG402, PE-SR402AL & PE-SR402FL

PE4206

REV. -	FSCM NO. 53919	CAD FILE 042309	SCALE N/A	SIZE A	147
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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.

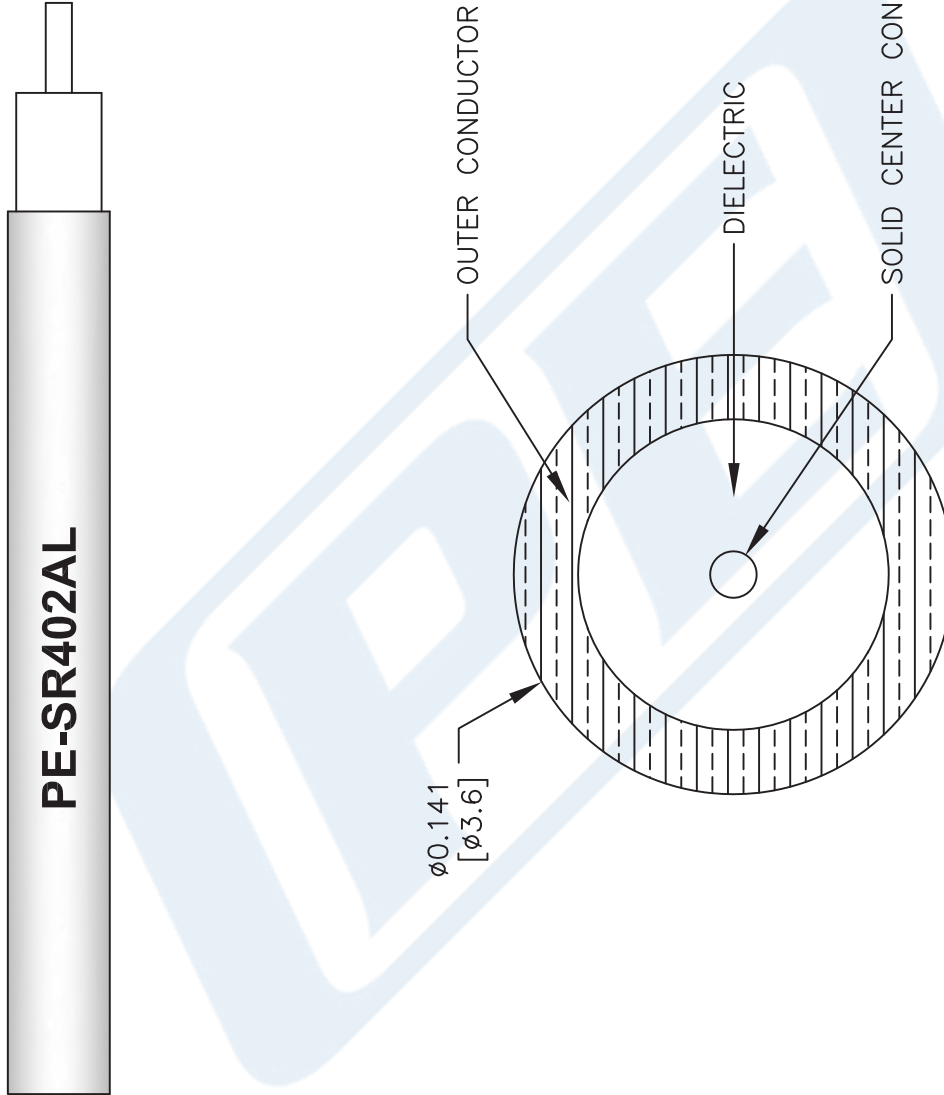
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URL: <https://www.pasternack.com/semirigid-0.141-50-ohm-coax-cable-tinned-aluminum-pe-sr402al-p.aspx>

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PE-SR402AL CAD Drawing

141 Semi-rigid Coax Cable with Tinned Aluminum



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DWG TITLE

PE-SR402AL

FSCM NO. 53919

CAD FILE 111716

SCALE N/A

SIZE A

41742

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