



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](#)



BNC Female Bulkhead Mount Hermetically Sealed Connector
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RF Connectors
Technical Data Sheet

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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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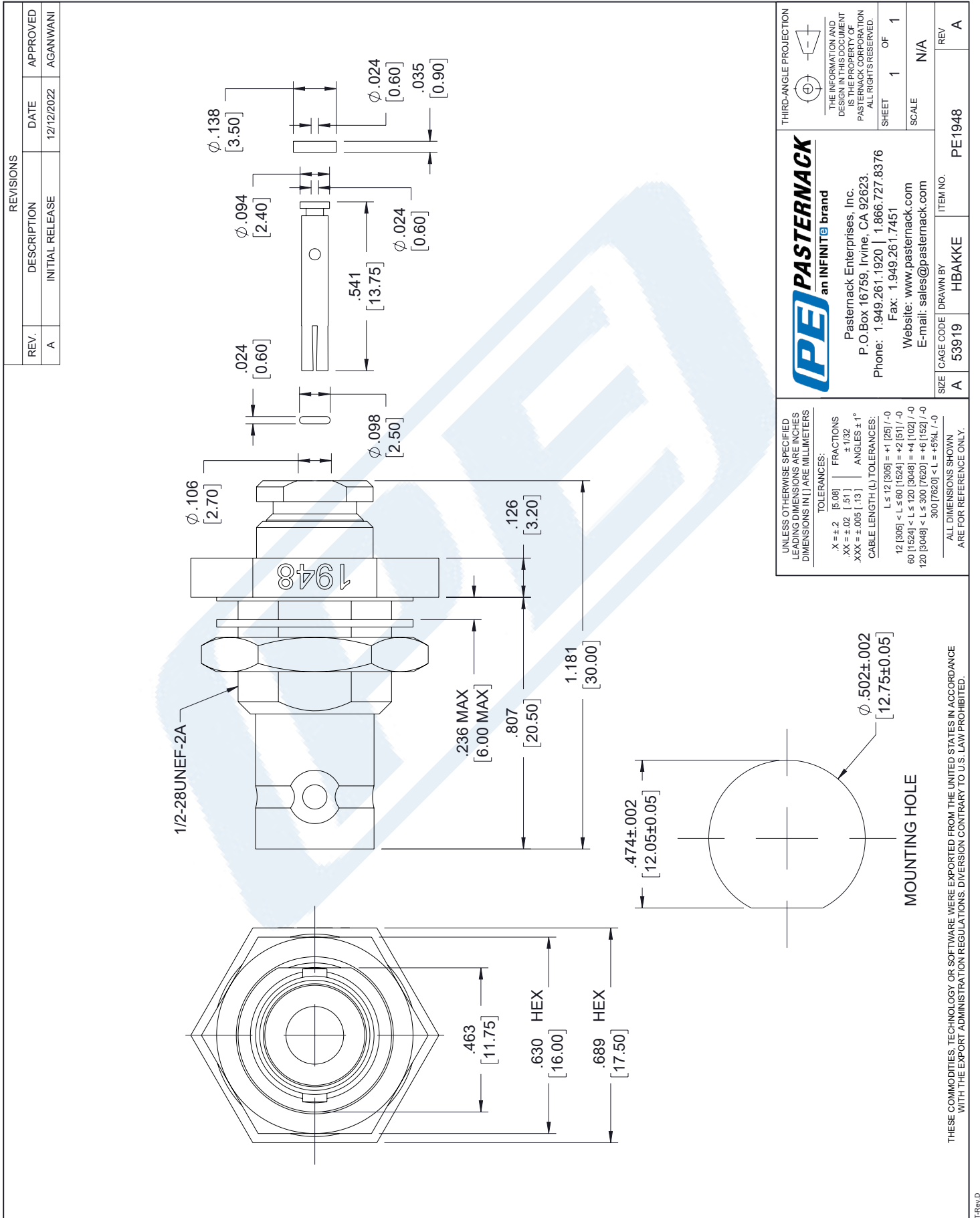
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PE1948 CAD Drawing

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Electrical Specifications

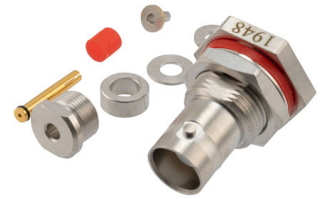
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Environmental Specifications

Temperature

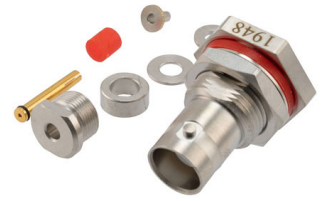
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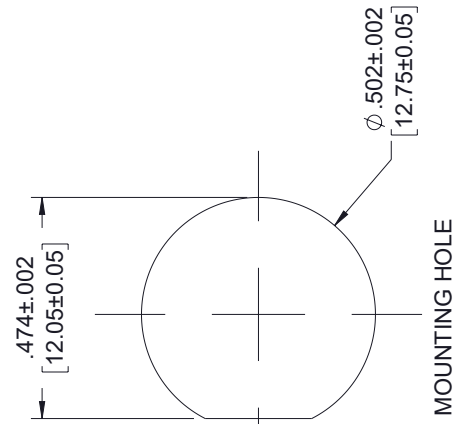
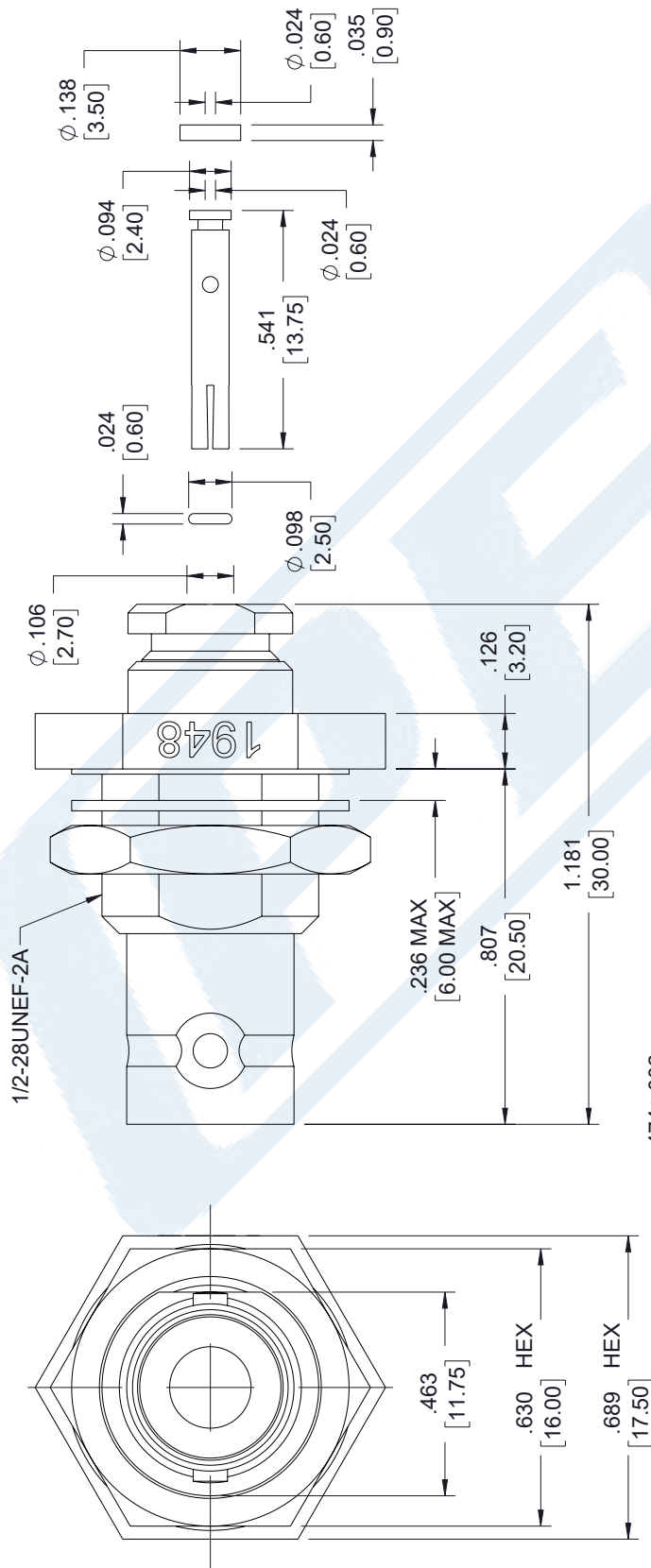
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12/12/2022	AGANWANI



THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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an INFINITI brand

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Website: www.pasternack.com
E-mail: sales@pasternack.com

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

TOLERANCES:

X = ± .2	[5.08]	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.

SIZE A

CAGE CODE 53919

DRAWN BY HBAKKE

ITEM NO. PE1948

REV. A

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Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



LMR-100A-PVC



Times Microwave Systems Connector Specification

Configuration

- Low Loss, Indoor/Outdoor Flexible Cable
- 2 Shield(s)

Features

- Max Operating Frequency of 8 GHz
- Low Loss Cable
- Phase Velocity 66% VoP

Applications

- Laboratory Applications
- General Purpose RF Interconnect

Description

LMR-100A-PVC part number from Pasternack is a LMR-100A-PVC coax cable that is flexible. Pasternack LMR-100A flexible coax cable is 50 Ohm and has a PE dielectric. Our LMR-100A coax is constructed with a 0.11 jacket made of PVC. LMR-100A coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-100A coax cable has an attenuation at 1 GHz of 24 dB.

Pasternack LMR-100A-PVC coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-100A cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-100A or other coax can be built and shipped same day as well.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Cutoff Frequency		90		GHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Time Delay		1.54 [5.05]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance			81	Ohms/1000ft
Outer Conductor DC Resistance			9.5	Ohms/1000ft
Nominal Capacitance		30.8 [101.05]		pF/ft [pF/m]
Nominal Inductance		0.077 [0.25]		uH/ft [uH/m]
Input Power (Peak)			600	Watts

Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



LMR-100A-PVC

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	3.9	8.9	10.9	15.8	22.8	dB/100ft
	12.8	29.2	35.76	51.84	74.8	dB/100m
Input Power (CW), Max	230	100	83	57	39	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	30.1	33.2	35.2	39.8	64.1	dB/100ft
	98.75	108.92	115.49	130.58	210.3	dB/100m
Input Power (CW), Max	29	27	25	22	13	Watts

Mechanical Specifications

Diameter	0.11 in [2.79 mm]
Weight	0.009 lbs/ft [0.01 kg/m]
Min. Bend Radius (Installation)	0.25 in [6.35 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Tensile Strength	15 lbs [6.8 kg]
Flat Plate Crush	10 lbs/in [0.18 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, 1 Strand	0.018 in [0.46 mm]
Conductor Type	Solid	
Dielectric	PE	0.06 in [1.52 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper Braid	
Jacket	PVC, Black	0.11 in [2.79 mm]

Environmental Specifications

Temperature	
Operating Range	-40 to 85 deg C
Storage Range	-70 to 85 deg C

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



LMR-100A-PVC

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URL: <https://www.pasternack.com/50-ohm-low-loss-flexible-lmr-100apvc-jacket-double-shielded-lmr-100a-pvc-p.aspx>

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