



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

## RF Connectors Technical Data Sheet

**PE1949**

### Configuration

- BNC Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG188, RG316, RG316-FEP, RG316-LSFH
- 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 PE1949, 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 PE1949 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, RG316-FEP, RG316-LSFH PE1949](#)



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## RF Connectors Technical Data Sheet

**PE1949**

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

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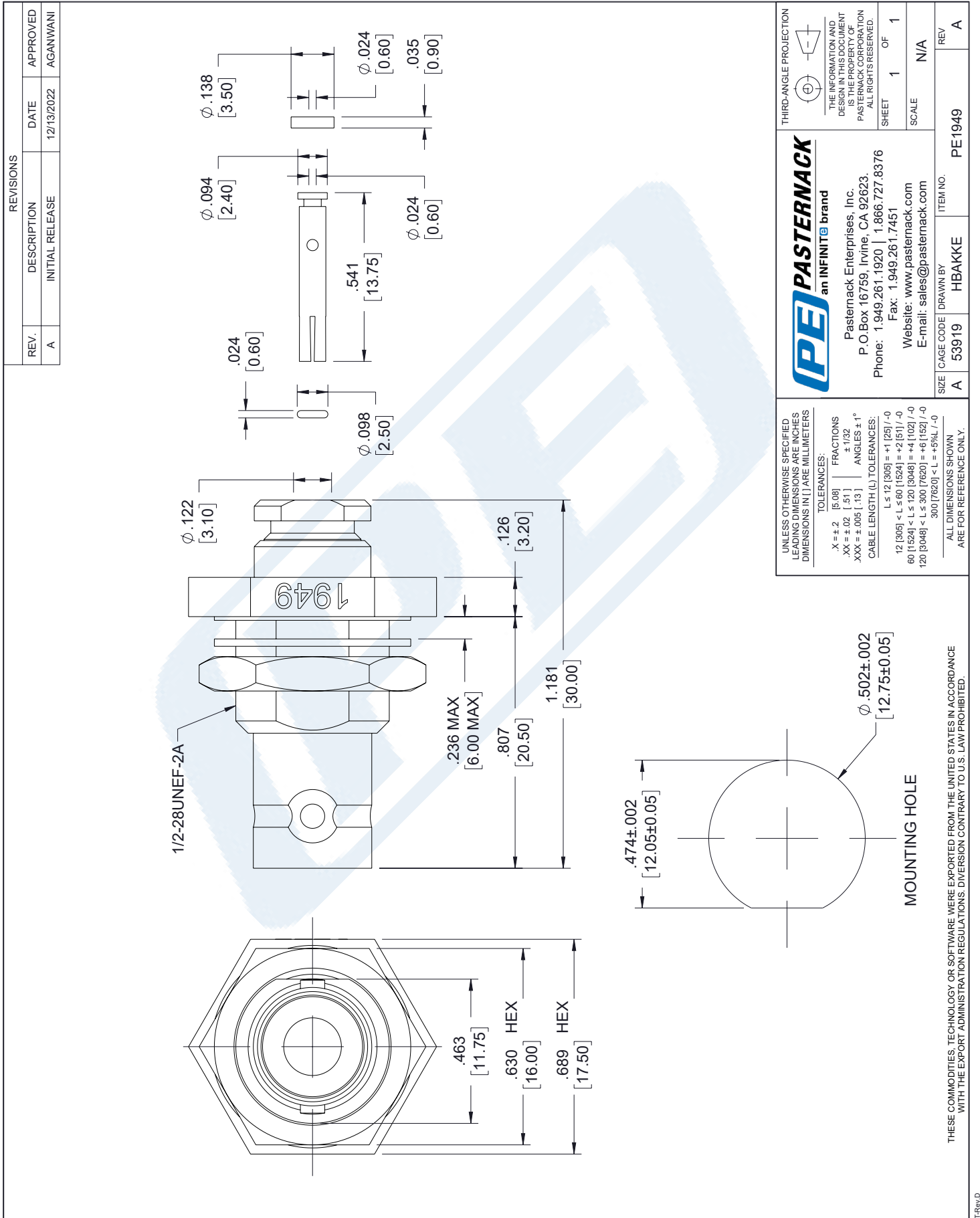
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# PE1949 CAD Drawing

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





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

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**Clamp/Solder Attachment for RG174, RG188, RG316**

**RF Connectors**  
**Technical Data Sheet**

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**Temperature**

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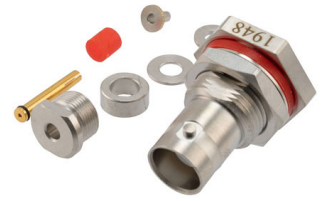
**Compliance Certifications** (see [product page](#) for current document)

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

### RF Connectors Technical Data Sheet

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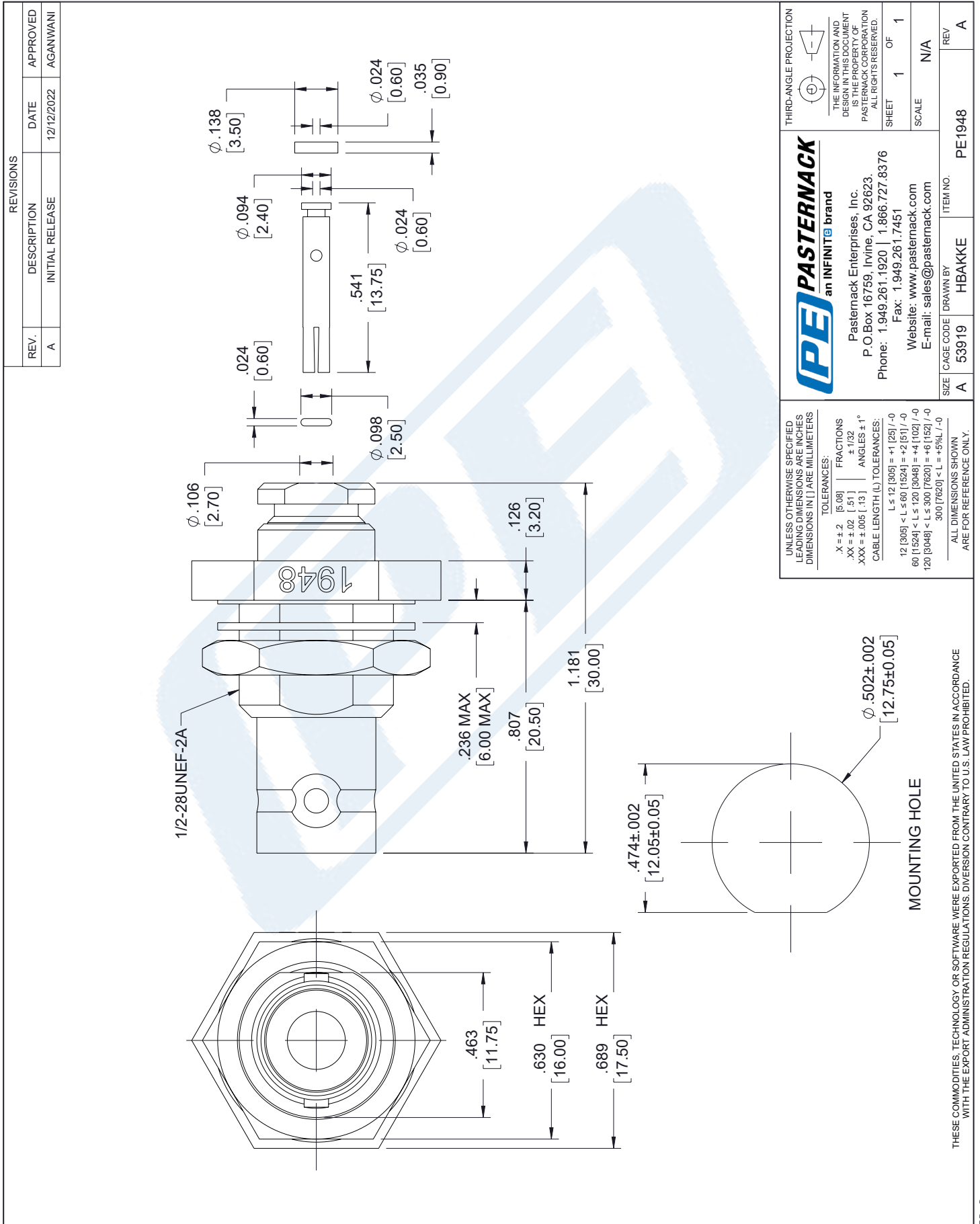
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# PE1948 CAD Drawing

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







## RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket

### RF Cables Technical Data Sheet

**RG174NM**

#### Configuration

- Non-Magnetic Flexible Cable
- 1 Shield(s)

#### Features

- Max Frequency 100 MHz
- Magnetic Susceptibility  $10^{-5}$

#### Applications

- General Purpose Test
- Medical
- Quantum Computing
- Custom Cable Assemblies
- Military and Aerospace

#### Description

RG174NM part number from Pasternack is a RG174 non-magnetic coax cable that is flexible. Pasternack flexible coax RF cable has an impedance of 50 Ohm and a PE dielectric. Our RG174 coax cable is constructed with a jacket made of PVC. This black-colored non-magnetic coax cable has a nominal capacitance of 31.7 pF/Ft.

The RG174 coax RF cable has a shield count of 1. Our coax cable from Pasternack has a maximum frequency of 0.1 GHz. Additional specifications for this RG174NM single-shielded RF coaxial cable are on our downloadable PDF datasheet above. This flexible coax RF cable has a minimum bend radius of 15 in along with 0.021 in of center conductor diameter.

Our RG174 coax cable can operate at temperatures ranging from -40 to +105 degrees C. The RG174NM flexible RF cable has a solid copper center conductor. This black-colored flexible RF cable with a 50 Ohm impedance has a typical insertion loss/ maximum attenuation of 12.5 dB/100ft at a frequency of 0.1 GHz.

Pasternack RG174 non-magnetic coax cables are part of over 40,000 RF, microwave, and millimeter wave components. These flexible cables and our other RF parts are available for same-day shipping worldwide. Custom RF cable assemblies using RG174, or other coax can be built and shipped the same business day as well.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		100	MHz
Impedance		50		Ohms
Nominal Capacitance		31.7 [104]		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: [RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket RG174NM](#)



RG174 Non-Magnetic Flexible Coaxial Cable,  
Single Shielded with Black PVC Jacket

**RF Cables**  
**Technical Data Sheet**

**RG174NM**

**Performance by Frequency Band**

Description	F1	F2	F3	F4	F5	Units
Frequency	100					MHz
Attenuation, Typ	12.5					dB/100ft
	41.01					dB/100m

**Mechanical Specifications**

Min. Bend Radius (Repeated) 1.5 in [38.1 mm]

**Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.021 in [0.53 mm]
Conductor Type	Solid	
Dielectric	PE PE	0.063 in [1.6 mm]
Outer Conductor	Copper 100% coverage	0 in [0 mm]
Jacket	PVC, Black	[ ]

**Environmental Specifications**

**Temperature**

Operating Range -40 to 105 deg C  
Storage Range -40 to 105 deg C

**Environmental Specification Notes:**

All tests performed in accordance with MIL-DTL-17 (current issue)

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket RG174NM](#)



## RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket

### RF Cables Technical Data Sheet

**RG174NM**

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

#### Plotted and Other Data

Notes:

RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC 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.

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