



## BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A

### RF Connectors Technical Data Sheet

**PE45319**

#### Configuration

- Snap-On BMA Jack Connector
- 50 Ohms
- Straight Body Geometry
- RG316, RG188, RG174, PE-C100, LMR-100A Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.4:1
- Gold Plated Beryllium Copper Contact
- 51.18µ in. minimum contact plating
- Blind Mate Connector
- Low-Engagement Force
- Radial and Axial Float Versions

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Blind Mating
- Rack and Panel
- Phased Array Systems
- Base Stations
- RF Backplanes
- Test I/O

#### Description

Pasternack's PE45319 BMA jack snap-on connector with crimp/solder attachment for RG316, RG188, RG174, PE-C100 and LMR-100A is part of our full line of RF components available for same-day shipping. Our BMA jack connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.4:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our BMA jack connector PE45319 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      |         | 12.4    | GHz   |
| VSWR                                 |         |         | 1.4:1   |       |
| Insertion Loss                       |         |         | 0.1     | dB    |
| Operating Voltage (AC)               |         |         | 250     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 750     | Vrms  |
| Insulation Resistance                | 5,000   |         |         | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A PE45319](#)



BMA Jack Snap-On Connector Crimp/Solder Attachment  
for RG316, RG188, RG174, PE-C100, LMR-100A

**RF Connectors Technical Data Sheet**

**PE45319**

**Mechanical Specifications**

**Size**

|               |                    |
|---------------|--------------------|
| Length        | 0.97 in [24.64 mm] |
| Width/Dia.    | 0.35 in [8.89 mm]  |
| Weight        | 0.007 lbs [3.18 g] |
| Mating Cycles | 1,000 Cycles       |

**Material Specifications**

| Description     | Material                   | Plating                    |
|-----------------|----------------------------|----------------------------|
| Contact         | Beryllium Copper           | Gold<br>51.18μ in. minimum |
| Insulation      | PTFE                       |                            |
| Outer Conductor | Beryllium Copper           | Gold                       |
| Body            | Passivated Stainless Steel |                            |

**Mechanical Specification Notes:**

Recommended axial float mount for best electrical performance: 0.51 +/- 0.25 mm (.020" +/- .010)

**Environmental Specifications**

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +165 deg C |
|-----------------|-------------------|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A PE45319](#)



## BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A

### RF Connectors Technical Data Sheet

**PE45319**

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

#### Plotted and Other Data

Notes:

BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A 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.

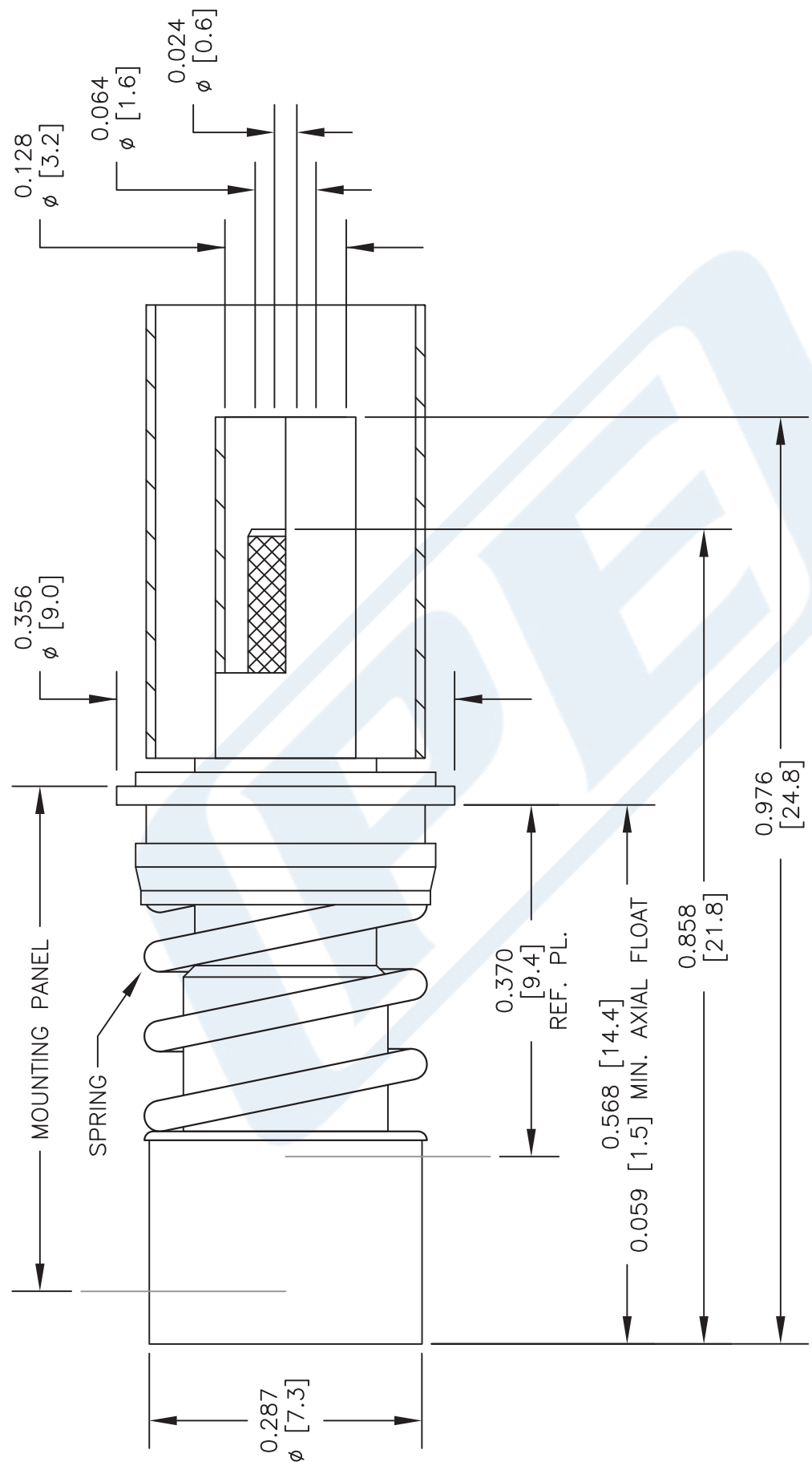
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Jack Snap-On Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100, LMR-100A PE45319](#)

URL: <https://www.pasternack.com/bma-jack-snap-on-rg316-rg188-rg174-pe-c100-lmr-100a-connector-pe45319-p.aspx>

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PE45319 CAD Drawing

BMA Jack Snap-On Connector Crimp/Solder Attachment for  
RG316, RG188, RG174, PE-C100, LMR-100A



| STANDARD TOLERANCES |       |
|---------------------|-------|
| .X                  | ±0.2  |
| .XX                 | ±0.1  |
| .XXX                | ±0.05 |

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

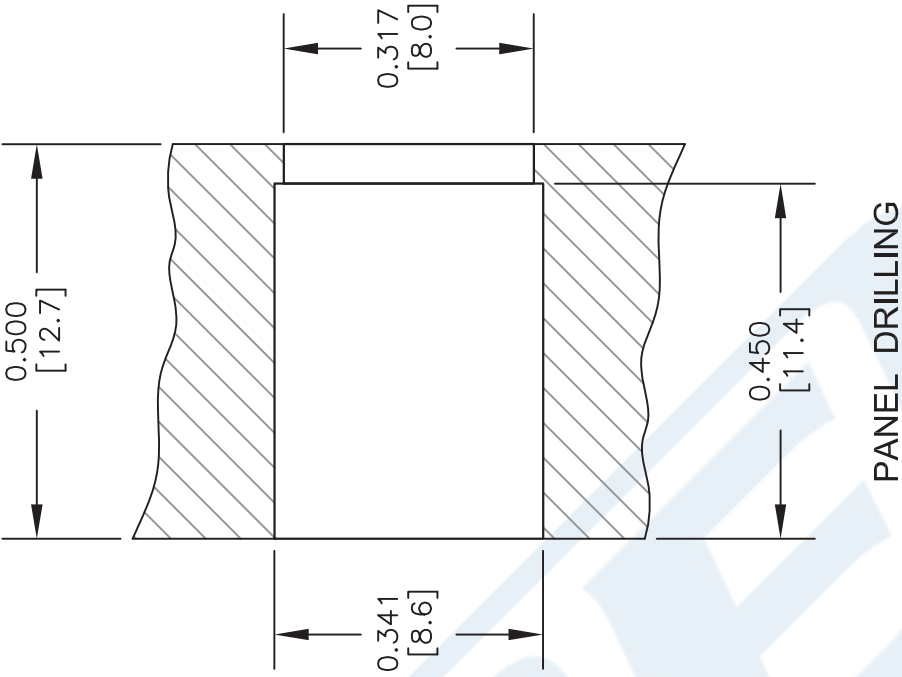
NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

|           |  |           |        |       |     |      |   |      |
|-----------|--|-----------|--------|-------|-----|------|---|------|
| DWG TITLE |  | CAD FILE  | 022017 | SCALE | N/A | SIZE | A | 2233 |
| PE45319   |  | CAGE CODE | 53919  |       |     |      |   |      |

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PE45319 CAD Drawing

BMA Jack Snap-On Connector Crimp/Solder Attachment for  
RG316, RG188, RG174, PE-C100, LMR-100A



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE HEAT SHRINK AND FERRULE ONTO CABLE.
3. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
4. FLARE BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
5. SLIDE FERRULE OVER BRAID AND CRIMP WITH .128" HEX CRIMP TOOL.

STANDARD TOLERANCES

- .X ±0.2
- .XX ±0.1
- .XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE45319

CAGE CODE 53919

CAD FILE 022017

SCALE N/A

SIZE A

2233

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3. DIMENSIONS ARE IN INCHES [mm].



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

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

**PE1948**

|                       |                                     |
|-----------------------|-------------------------------------|
| 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**

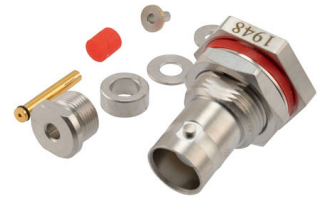
|                 |                                     |
|-----------------|-------------------------------------|
| Operating Range | -65 to +165 deg C                   |
| Humidity        | MIL-STD-202, Method106              |
| Thermal Shock   | MIL-STD-202, Method107, Condition B |
| Salt Spray      | 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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## BNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316

### RF Connectors Technical Data Sheet

**PE1948**

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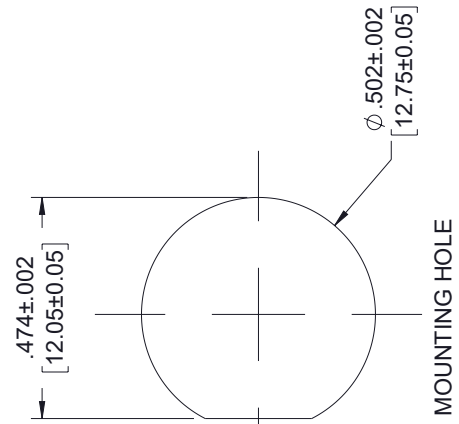
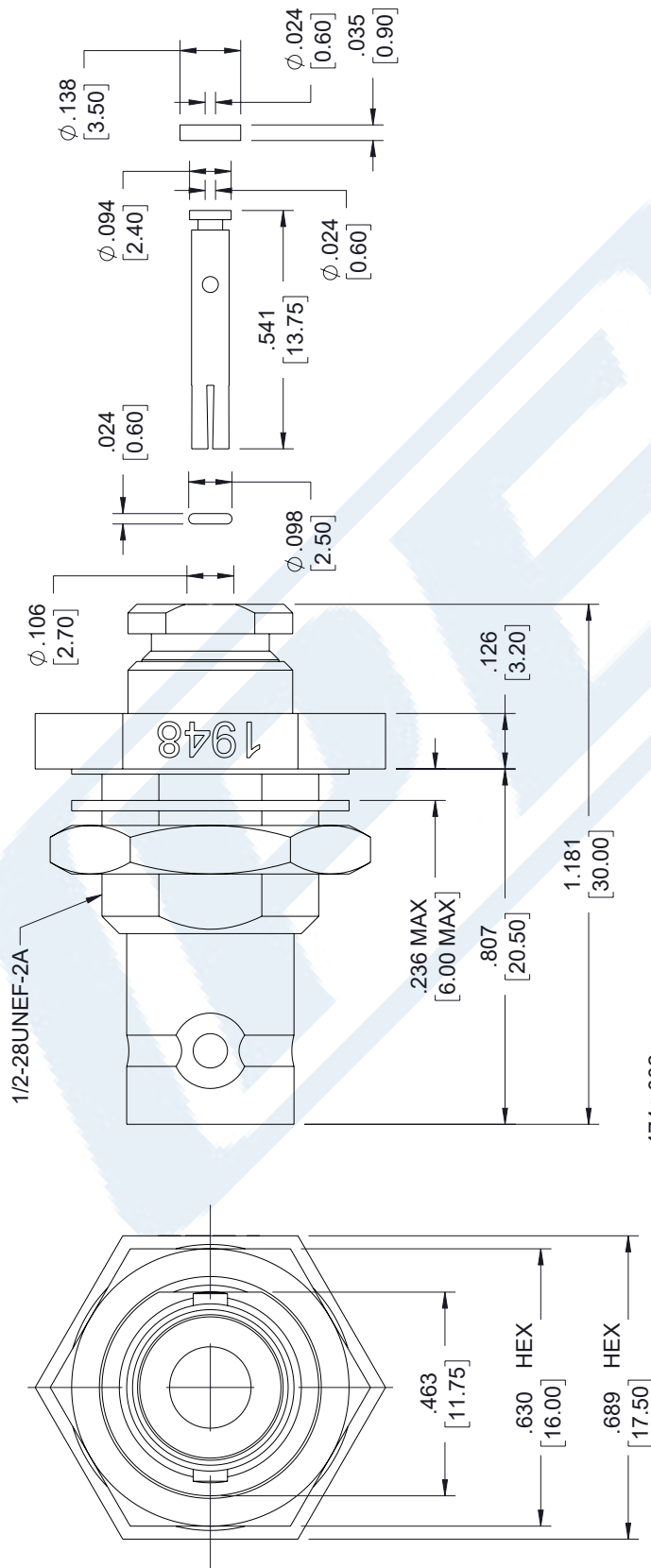
URL: <https://www.pasternack.com/bnc-female-rg174-rg188-rg316-connector-pe1948-p.aspx>

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# PE1948 CAD Drawing

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

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



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.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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|      |           |          |          |     |
|------|-----------|----------|----------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
| A    | 53919     | HBAKKE   | PE1948   | A   |

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T-Rev.D

## 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

|                    |                 |
|--------------------|-----------------|
| <b>Temperature</b> |                 |
| 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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## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket

