



## TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188

### RF Connectors Technical Data Sheet

**PE4454**

#### Configuration

- TNC Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG174, RG316, RG188

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4454 TNC male right angle connector with clamp/solder attachment for RG174, RG316 and RG188 is part of our full line of RF components available for same-day shipping. Its right angle body geometry allows for easier connections in tight spaces.

Our TNC male right angle connector PE4454 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.

#### Mechanical Specifications

Weight 0.096 lbs [43.54 g]

#### Material Specifications

| Description | Material | Plating |
|-------------|----------|---------|
| Body        | Brass    | Nickel  |

#### Environmental Specifications

**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: [TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188 PE4454](#)

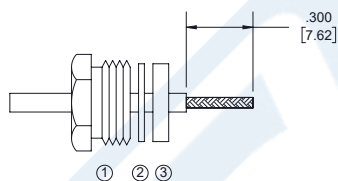


## TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188

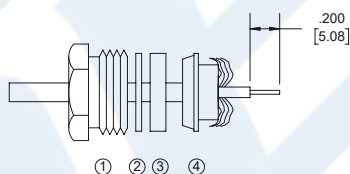
### RF Connectors Technical Data Sheet

**PE4454**

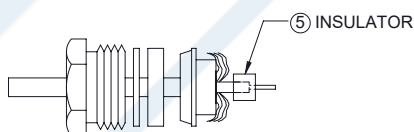
#### Assembly Instruction



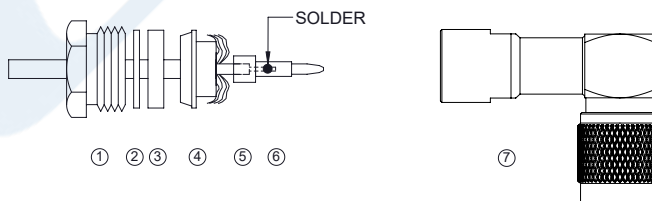
1. SLIDE CLAMP NUT ①, WASHER ② & GASKET ③ OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TAPER END OF BRAID TO PERMIT ASSEMBLY OF CLAMP.



2. SLIDE BRAID CLAMP ④ OVER BRAID & SEAT AGAINST CABLE. FORM BRAID OVER CLAMP NUT. TRIM BRAID BACK TO SHOULDER. CUT DIELECTRIC & CENTER CONDUCTOR TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR.



3. SLIDE INSULATOR ⑤ AGAINST THE BRAID CLAMP. SOFT SOLDER CONTACT ⑥ TO CENTER CONDUCTOR. REMOVE EXCESS SOLDER. DO NOT OVER HEAT DIELECTRIC. INSERT CABLE ASSEMBLY INTO BODY ⑦ & TIGHTEN BY CLAMP NUT ONLY.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188 PE4454](#)



## TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188

### RF Connectors Technical Data Sheet

**PE4454**

TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188 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: [TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188 PE4454](https://www.pasternack.com/tnc-male-standard-rg174-rg316-rg188-connector-pe4454-p.aspx)

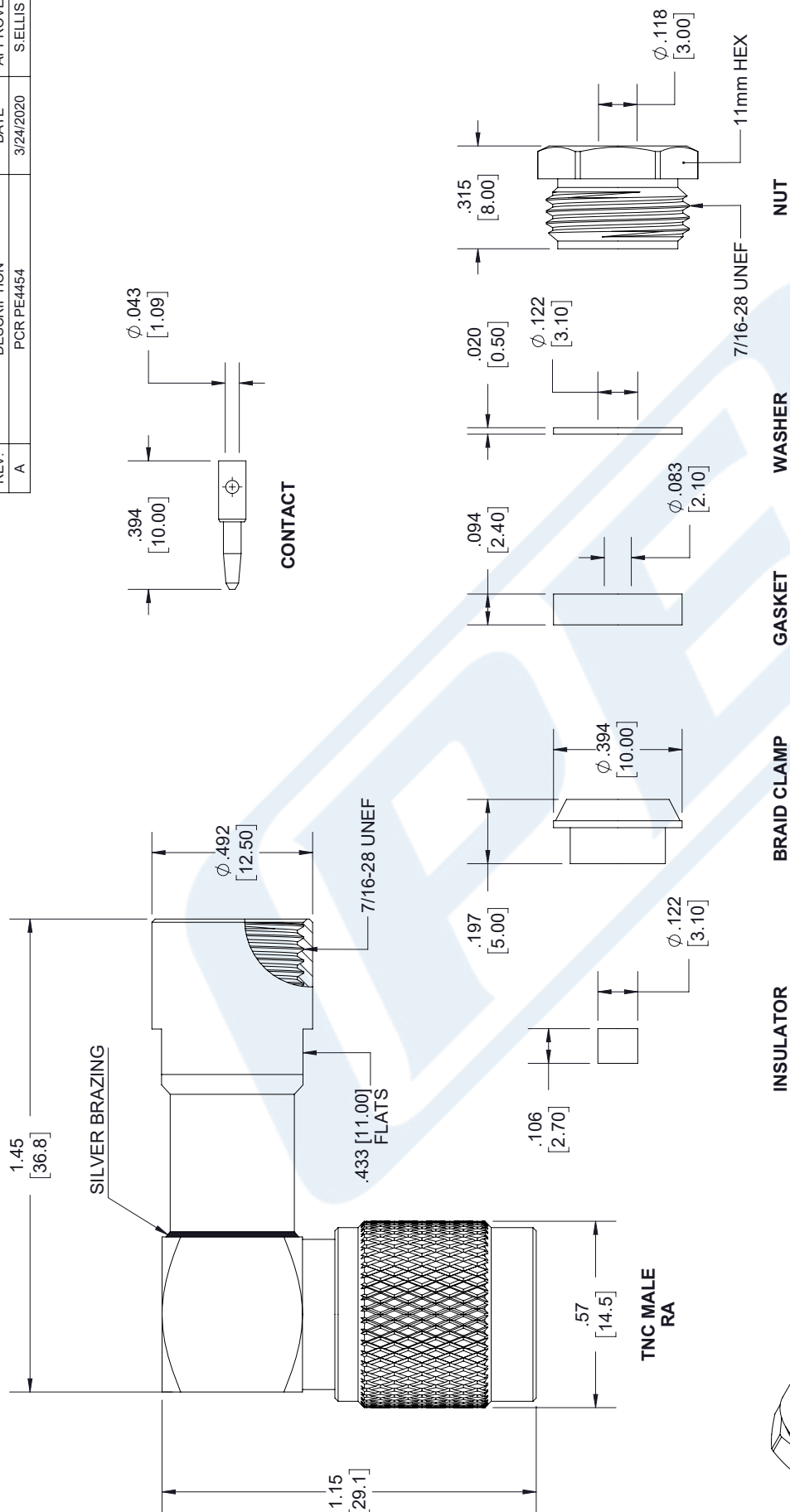
URL: <https://www.pasternack.com/tnc-male-standard-rg174-rg316-rg188-connector-pe4454-p.aspx>

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# PE4454 CAD Drawing

TNC Male Right Angle Connector Clamp/Solder Attachment For RG174, RG316, RG188

| REVISIONS |             |           |          |
|-----------|-------------|-----------|----------|
| REV.      | DESCRIPTION | DATE      | APPROVED |
| A         | PCR PE4454  | 3/24/2020 | S.ELLIS  |



INSULATOR

BRAID CLAMP

GASKET

WASHER

NUT

11mm HEX

TNC MALE  
RA

7/16-28 UNEF

THIRD-ANGLE PROJECTION

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SHEET 1 OF 2

SCALE N/A

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Pasternack Enterprises, Inc.  
P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
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.

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## TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188

### PE1965



#### Configuration

- TNC Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-100A-PVC, PE-C100, RG174, RG316, RG188
- Bulkhead

#### Features

- Max. Operating Frequency 4.5 GHz
- Excellent VSWR of 1.2:1
- Gold Plated Phosphor Bronze Contact
- Hermetically Sealed

#### Applications

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

#### Description

Pasternack's PE1965 TNC Female Hermetically Sealed Bulkhead Mount Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316 and RG188 Cable is part of our full line of RF components available for same-day shipping. Our TNC female connector operates up to a maximum frequency of 4.5 GHz and offers excellent VSWR of 1.2:1. This TNC 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 TNC female bulkhead connector PE1965 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      |         | 4.5     | GHz   |
| VSWR                                 |         |         | 1.2:1   |       |
| Insertion Loss                       |         |         | 0.212   | dB    |
| Operating Voltage (AC)               |         |         | 500     | Vrms  |
| 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 |
| Impedance                            |         | 50      |         | Ohms  |

#### Mechanical Specifications

##### Size

|        |                    |
|--------|--------------------|
| Length | 1.17 in [29.72 mm] |
| Width  | 0.69 in [17.53 mm] |
| Height | 0.69 in [17.53 mm] |
| Weight | 0.022 lbs [9.98 g] |

# TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188



# PE1965

|                       |                                       |
|-----------------------|---------------------------------------|
| Mating Cycles         | 500 Cycles                            |
| Mating Torque         | 4.1 to 6.1 in-lbs [[0.46 to 0.69 Nm]] |
| Cable Retention Force | 6.1 lbs [2.77 kg]                     |

## Material Specifications

| Description | Material        | Plating   |
|-------------|-----------------|-----------|
| Contact     | Phosphor Bronze | Gold      |
| Insulation  | PTFE            |           |
| Body        | Brass           | Tri-Metal |

## Environmental Specifications

|                    |                                     |
|--------------------|-------------------------------------|
| <b>Temperature</b> |                                     |
| 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:

TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188 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: [TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188 PE1965](#)

URL: <https://www.pasternack.com/tnc-female-lmr-100a-pvc-pe-c100-rg316-rg188-connector-pe1965.html>

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# TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188



TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder  
Attachment for LMR-100A-PVC, PE-C100, RG174, RG316, RG188



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



### LMR-100A-PVC

#### Times Microwave Systems Coax Cable 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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