



N Female Bulkhead Connector Clamp/Solder Attachment For RG58, RG55, RG141, RG142, RG223, RG400, .640 inch DD Hole

RF Connectors Technical Data Sheet

PE4114

Configuration

- N Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG58, RG142, RG223, RG400, RG141, RG303, RG55, LMR-400, PE-C195, PE-P195
- Bulkhead

Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1

- Gold Plated Brass Contact
- 30 μ in minimum contact plating

Applications

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

Description

Pasternack's PE4114 type N female bulkhead connector with clamp/solder attachment for RG58, RG142, RG223, RG400, RG141, RG303, RG55, LMR-400, PE-C195 and PE-P195 (.640 inch DD hole) is part of our full line of RF components available for same-day shipping. Our type N female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. This type N 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 type N female bulkhead connector PE4114 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 | | 6 | GHz |
| VSWR | | | 1.35:1 | |
| Operating Voltage (AC) | | | 1,000 | Vrms |

Mechanical Specifications

Size

Length
Width/Dia.

1.67 in [42.42 mm]
0.8 in [20.32 mm]

Weight

0.097 lbs [44 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Bulkhead Connector Clamp/Solder Attachment For RG58, RG55, RG141, RG142, RG223, RG400, .640 inch DD Hole PE4114](#)

N Female Bulkhead Connector Clamp/Solder Attachment For RG58, RG55, RG141, RG142, RG223, RG400, .640 inch DD Hole



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Material Specifications

| Description | Material | Plating |
|-----------------|----------|--------------------------------|
| Contact | Brass | Gold 30 μ in minimum |
| Insulation | PTFE | |
| Outer Conductor | Brass | Nickel 100 μ in minimum |
| Body | Brass | Nickel 100 μ in minimum |

Mechanical Specification Notes:

When attaching the connector to the cable use a clamp torque value of 26 to 30 in-lbs [2.94 to 3.39 Nm]

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

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

Plotted and Other Data

Notes:

N Female Bulkhead Connector Clamp/Solder Attachment For RG58, RG55, RG141, RG142, RG223, RG400, .640 inch DD Hole 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/n-female-standard-rg58-rg55-rg141-rg142-rg223-rg400-connector-pe4114-p.aspx>

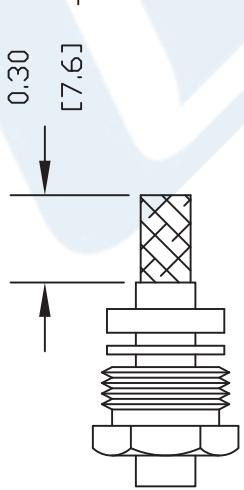
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE4114 CAD Drawing

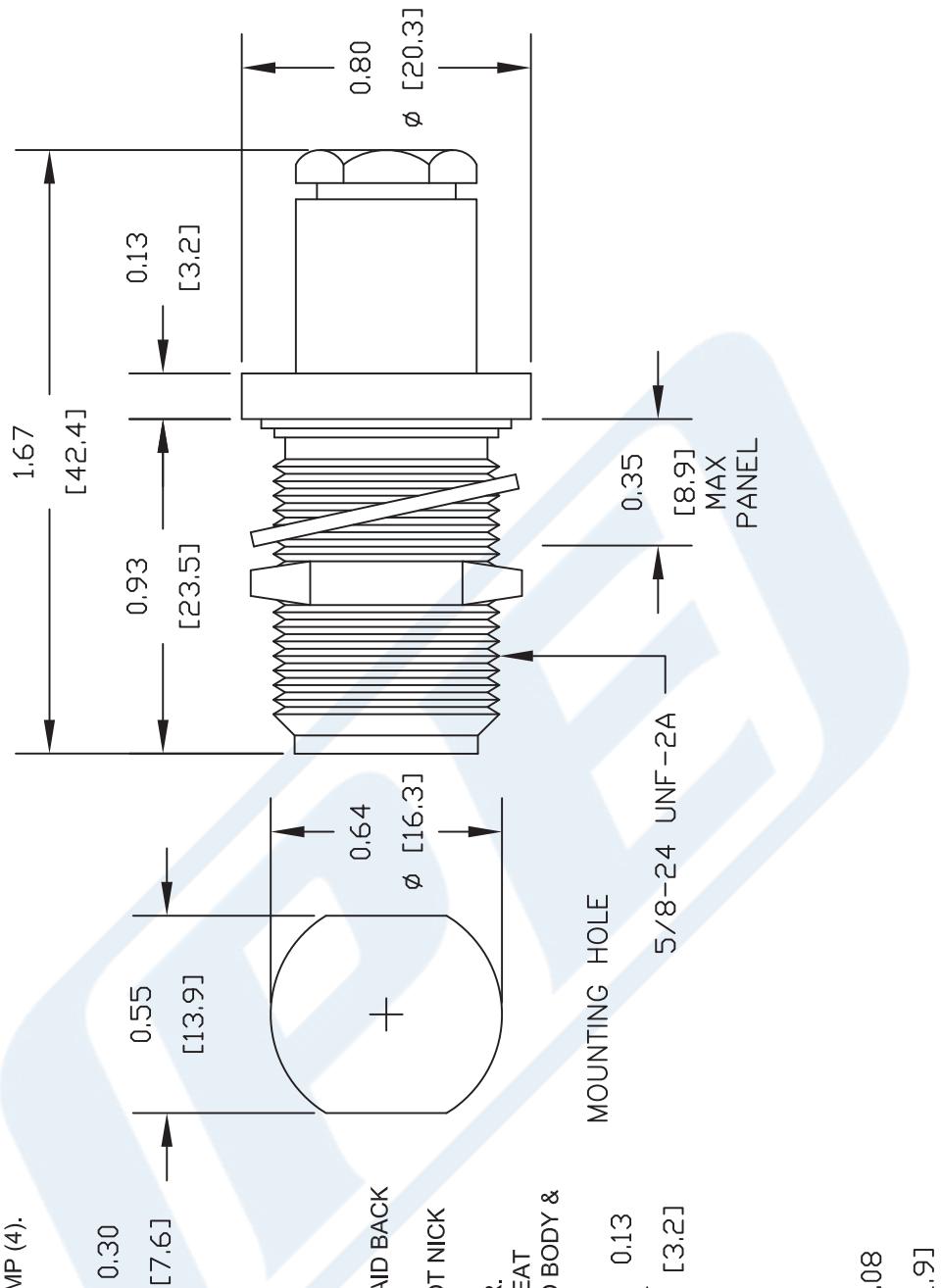
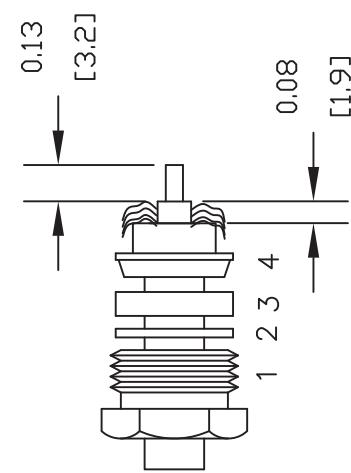
N Female Bulkhead Connector Clamp/Solder Attachment For RG58,
RG55, RG141, RG142, RG223, RG400, .640 inch DD Hole

ASSEMBLY PROCEDURES

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 BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.



2. FORM BRAID OVER CLAMP NUT (4). TRIM BRAID BACK TO SHOULDER. CUT DIELECTRIC & CENTER CONDUCTOR TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR. SOLDER CONTACT TO CENTER CONDUCTOR. REMOVE EXCESS SOLDER. DO NOT OVER HEAT DIELECTRIC. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



PE PASTERNACK®

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PE4114

DWG TITLE

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

SCALE N/A

SIZE A

147



**C Female Connector Clamp/Solder Attachment
4 Hole Flange Mount for RG58, RG55, RG141,
RG142, RG223, RG400, .718 inch Hole Spacing**

TECHNICAL DATA SHEET

PE4969

Configuration

| | |
|------------------------------------|--|
| Connector | C Female |
| Connector Specification | MIL-C-39012 |
| Connector Interface Type | RG58, RG55, RG141, RG142, RG223, RG400 |
| Attachment Method (Shield/Contact) | Clamp/Solder |
| Body Style | Straight |
| Mount Method | 4 Hole Flange |

Electrical Specifications

| | |
|-----------|---------|
| Impedance | 50 Ohms |
|-----------|---------|

Mechanical Specifications

| | |
|-----------------|-------------------|
| Temperature | -65 to +165 deg C |
| Operating Range | |

Size

| | |
|------------|---------------------|
| Length | 1.3 in [33.02 mm] |
| Width/Dia. | 1 in [25.40 mm] |
| Height | 1 in [25.4 mm] |
| Weight | 0.082 lbs [37.19 g] |

Connector

| | |
|-------------------------------|---------------|
| Type | C Female |
| Contact Material and Plating | Silver |
| Contact Plating Specification | QQ-S-365 |
| Body Material and Plating | Brass, Nickel |
| Dielectric Type | Teflon |

Compliance Certifications

| | |
|---|------------|
| (visit www.Pasternack.com for current document) | |
| RoHS Compliant | |
| REACH Compliant | 06/18/2012 |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [C Female Connector Clamp/Solder Attachment 4 Hole Flange Mount for RG58, RG55, RG141, RG142, RG223, RG400, .718 inch Hole Spacing PE4969](#)



C Female Connector Clamp/Solder Attachment 4 Hole Flange Mount for RG58, RG55, RG141, RG142, RG223, RG400, .718 inch Hole Spacing

TECHNICAL DATA SHEET

PE4969

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

C Female Connector Clamp/Solder Attachment 4 Hole Flange Mount for RG58, RG55, RG141, RG142, RG223, RG400, .718 inch Hole Spacing from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: <http://www.pasternack.com/c-female-standard-rg58-rg55-rg141-rg142-rg223-rg400-connector-pe4969-p.aspx>

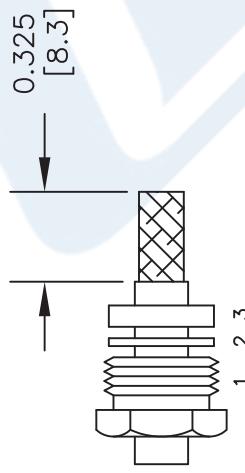
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE4969 CAD Drawing

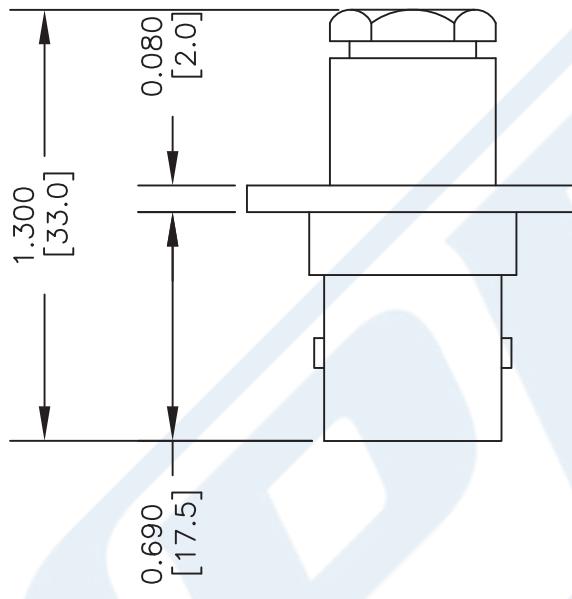
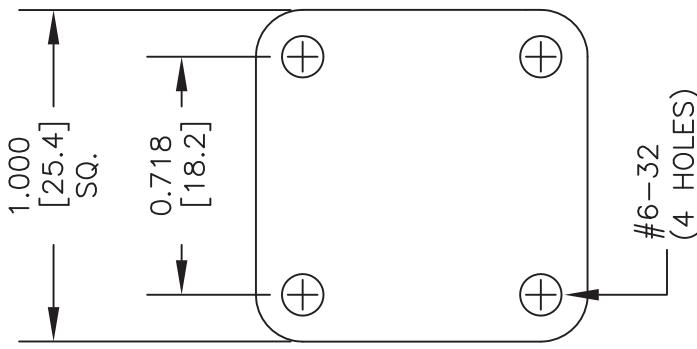
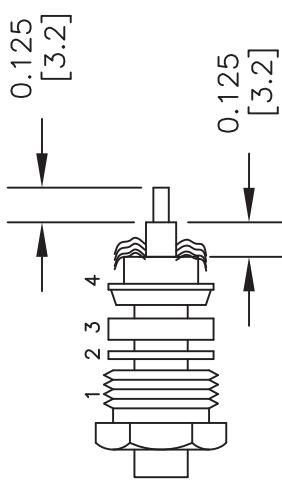
C Female Connector Clamp/Solder Attachment 4 Hole Flange Mount for
RG58, RG55, RG141, RG142, RG223, RG400, .718 inch Hole Spacing

ASSEMBLY PROCEDURES

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 BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.



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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

| DWG TITLE | PE4969 | FSCM NO. | 53919 | CAD FILE | 053014 | SCALE | N/A | SIZE | A | 2233 |
|---|--------|----------|-------|----------|--------|-------|-----|------|---|------|
| PASTERNACK® THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com | | | | | | | | | | |

LMR®-195

Flexible Low Loss Communications Coax

Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
- Drop-in replacement for RG-58 and RG-142

• **LMR®** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.

• **LMR®-DB** is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.

• **LMR®-FR** is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.

• **LMR®-FR-PVC** is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.

• **LMR®-PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.

• **LMR®-PVC-W** is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.

• **LMR®-MA** is a flexible cable designed specifically for mobile antenna applications. It has a PVC jacket and un-bonded aluminum tape to facilitate end stripping with automated equipment.

• **Flexibility** and bendability are hallmarks of the LMR-195 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.

• **Low Loss** is another hallmark feature of LMR-195. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

• **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).

• **Weatherability**: LMR-195 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.

• **Connectors**: A wide variety of connectors are available for LMR-195 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

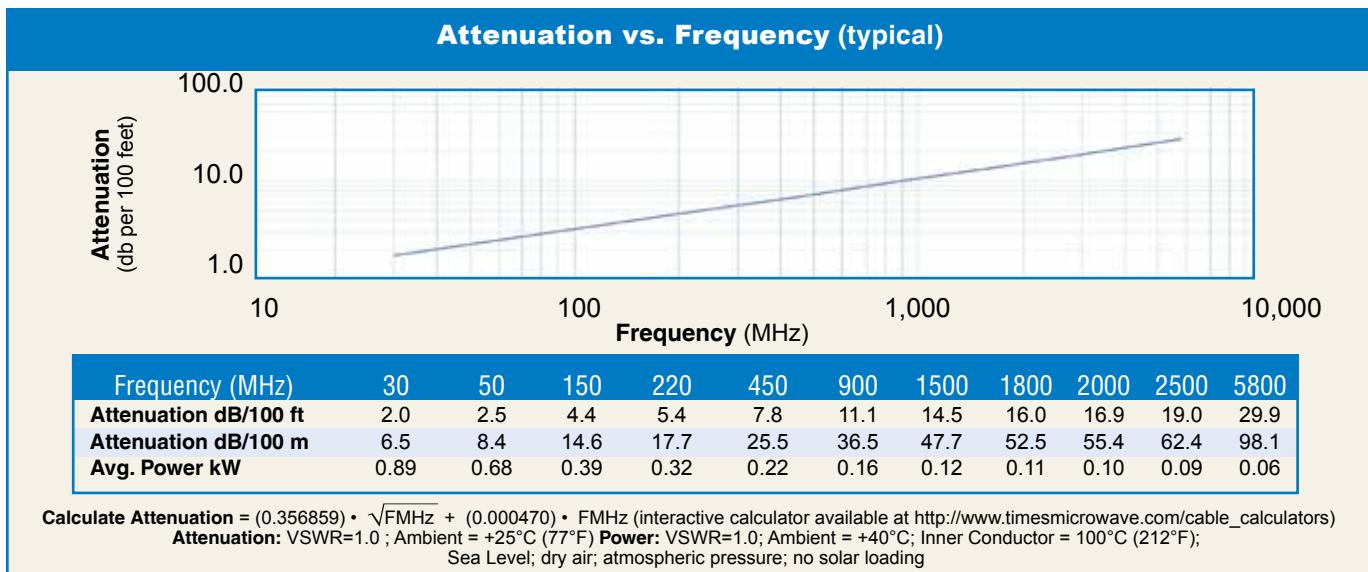
• **Cable Assemblies**: All LMR-195 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Part Description | | | | | Stock |
|------------------|--------------------------|--------|-------|-------|-------|
| Part Number | Application | Jacket | Color | Code | |
| LMR-195 | Outdoor | PE | Black | 54110 | |
| LMR-195-DB | Outdoor/Watertight | PE | Black | 54113 | |
| LMR-195-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54111 | |
| LMR-195-FR-W | Indoor/Outdoor Riser CMR | FRPE | White | 54158 | |
| LMR-195-FR-PVC | Indoor/Outdoor Riser CMR | FRPVC | Black | 54105 | |
| LMR-195-MA | Mobile Antennas | PVC | Black | 54210 | |
| LMR-195-PVC | General Purpose | PVC | Black | 54215 | |
| LMR-195-PVC-W | General Purpose | PVC | White | 54199 | |

| Construction Specifications | | | |
|-----------------------------|-------------------|-------|--------|
| Description | Material | In. | (mm) |
| Inner Conductor | Solid BC | 0.037 | (0.94) |
| Dielectric | Foam PE | 0.110 | (2.79) |
| Outer Conductor | Aluminum Tape | 0.116 | (2.95) |
| Overall Braid | Tinned Copper | 0.139 | (3.53) |
| Jacket | (see table above) | 0.195 | (4.95) |

| Mechanical Specifications | | | | Electrical Specifications | | | |
|---------------------------|----------------|-------|----------|---------------------------|--------------|-------|----------|
| Performance Property | Units | US | (metric) | Performance Property | Units | US | (metric) |
| Bend Radius: installation | in. (mm) | 0.5 | (12.7) | Velocity of Propagation | % | 76 | |
| Bend Radius: repeated | in. (mm) | 2.0 | (50.8) | Dielectric Constant | NA | 1.56 | |
| Bending Moment | ft-lb (N-m) | 0.2 | (0.27) | Time Delay | nS/ft (nS/m) | 1.27 | (4.17) |
| Weight | lb/ft (kg/m) | 0.021 | (0.03) | Impedance | ohms | 50 | |
| Tensile Strength | lb (kg) | 40 | (18.2) | Capacitance | pF/ft (pF/m) | 25.4 | (83.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 15 | (0.27) | Inductance | uH/ft (uH/m) | 0.064 | (0.21) |

| Environmental Specifications | | | |
|--------------------------------|----------|---------|--|
| Performance Property | °F | °C | |
| Installation Temperature Range | -40/+185 | -40/+85 | |
| Storage Temperature Range | -94/+185 | -70/+85 | |
| Operating Temperature Range | -40/+185 | -40/+85 | |



Connectors

| Interface | Description | Part Number | Stock Code | VSWR** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* Body /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|-----------|---------------|-----------------|------------|-----------------------|--------------|----------------------|----------------------|----------------------|----------------|---------------|---------------|
| N male | Straight Plug | TC-195-NM | 3190-1555 | <1.25:1 (2.5) | Knurl | Solder | Crimp | S/G | 1.5 (38.1) | 0.75 (19.1) | 0.073 (33.1) |
| N male | Right Angle | TC-195-NMH-RA-D | 3190-2425 | <1.35:1 (6) | Hex/Knurl | Solder | Crimp | A/G | 1.3 (32.1) | 1.19 (30.1) | 0.083 (37.5) |
| SMA male | Straight Plug | TC-195-SM | 3190-1553 | <1.25:1 (2.5) | Hex | Solder | Crimp | SS/G | 1.0 (25.4) | 0.32 (8.1) | 0.015 (6.8) |
| TNC male | Straight Plug | TC-195-TM | 3190-1554 | <1.25:1 (2.5) | Knurl | Solder | Crimp | S/G | 1.4 (35.6) | 0.59 (15.0) | 0.045 (20.4) |

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair

Install Tools

| Type | Part Number | Stock Code | Description |
|-------------------|--------------------|------------|--|
| Crimp Tool | CT-240/200/195/100 | 3190-667 | Crimp tool for LMR-100,195, 200 and 240 connectors |
| Cutting Tool | CCT-01 | 3190-1544 | Cable end flush cut tool |
| Deburr Tool | DBT-U | 3192-001 | Removes center conductor rough edges |
| Replacement Blade | RB-01 | 3190-1609 | Replacement blade for cutting tool |

