



TNC Male Right Angle Connector Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch

## RF Connectors Technical Data Sheet

**PE4451**

### Configuration

- TNC Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch

### Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.35:1
- Gold Plated Brass Contact
- 30 µm minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4451 TNC male right angle connector with crimp/crimp attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 and .195 inch is part of our full line of RF components available for same-day shipping. Our TNC male connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.35:1. Its right angle body geometry allows for easier connections in tight spaces.

Our TNC male right angle connector PE4451 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      |         | 3       | GHz   |
| VSWR                   |         |         | 1.35:1  |       |
| Operating Voltage (AC) |         |         | 500     | Vrms  |

### Mechanical Specifications

|             |                     |
|-------------|---------------------|
| <b>Size</b> |                     |
| Length      | 1.35 in [34.29 mm]  |
| Width/Dia.  | 0.571 in [14.50 mm] |
| Height      | 1.146 in [29.11 mm] |
| Weight      | 0.062 lbs [28.12 g] |

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 Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch PE4451](#)



TNC Male Right Angle Connector Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch

## RF Connectors Technical Data Sheet

**PE4451**

### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>30 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |

### Environmental Specifications

#### Temperature

Operating Range

-65 to +165 deg C

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

### Plotted and Other Data

Notes:

TNC Male Right Angle Connector Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch 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.

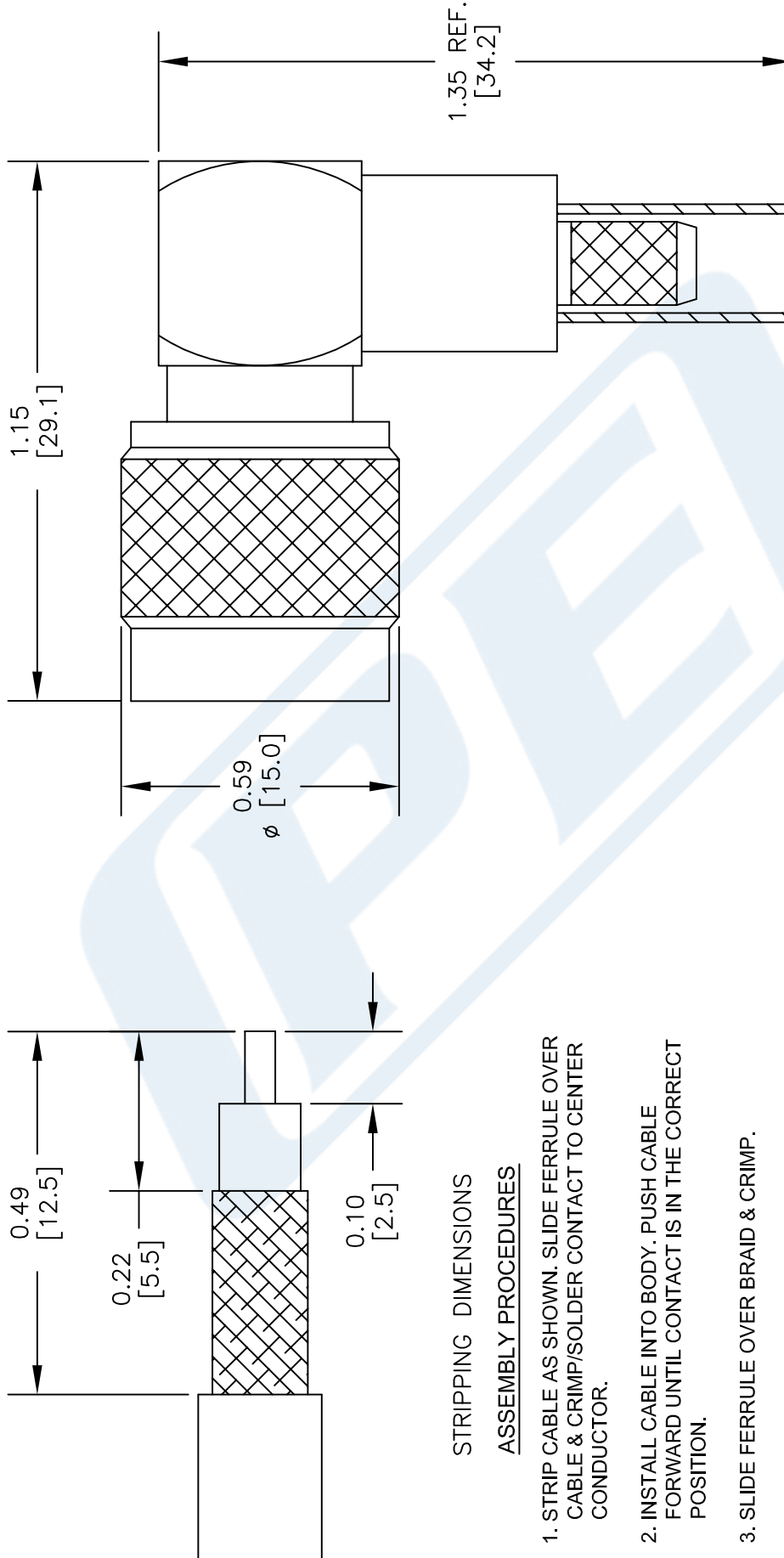
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle Connector Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch PE4451](#)

URL: <https://www.pasternack.com/tnc-male-standard-rg58-connector-pe4451-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.

# PE4451 CAD Drawing

TNC Male Right Angle Connector Crimp/Crimp Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch



## STRIPPING DIMENSIONS ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SLIDE FERRULE OVER CABLE & CRIMP/SOLDER CONTACT TO CENTER CONDUCTOR.
2. INSTALL CABLE INTO BODY. PUSH CABLE FORWARD UNTIL CONTACT IS IN THE CORRECT POSITION.
3. SLIDE FERRULE OVER BRAID & CRIMP.

## CRIMP SIZE REQUIRED

CONTACT: .068" HEX CRIMP TOOL  
FERRULE: .213" HEX CRIMP TOOL

DWG TITLE

**PE4451**

- 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

CAD FILE 031414

SCALE N/A

SIZE A

150



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SMA Male Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch

## RF Connectors Technical Data Sheet

**PE4215**

### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch
- 5/16 inch Hex

### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4215 SMA male connector with crimp/solder attachment for RG58, RG303, RG141, PE-C195, LMR-195 and 0.195 inch is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.5:1.

Our SMA male connector PE4215 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                                 |         |         | 1.5:1   |       |
| Operating Voltage (AC)               |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |

### Mechanical Specifications

#### Size

|               |                                 |
|---------------|---------------------------------|
| Length        | 0.906 in [23.01 mm]             |
| Width/Dia.    | 0.315 in [8.00 mm]              |
| Weight        | 0.016 lbs [7.26 g]              |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch PE4215](#)



SMA Male Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch

## RF Connectors Technical Data Sheet

**PE4215**

### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>50 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |
| Crimp Sleeve | Brass    | Nickel                    |

### Environmental Specifications

#### Temperature

Operating Range -65 to +165 deg C

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

### Plotted and Other Data

Notes:

SMA Male Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch 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.

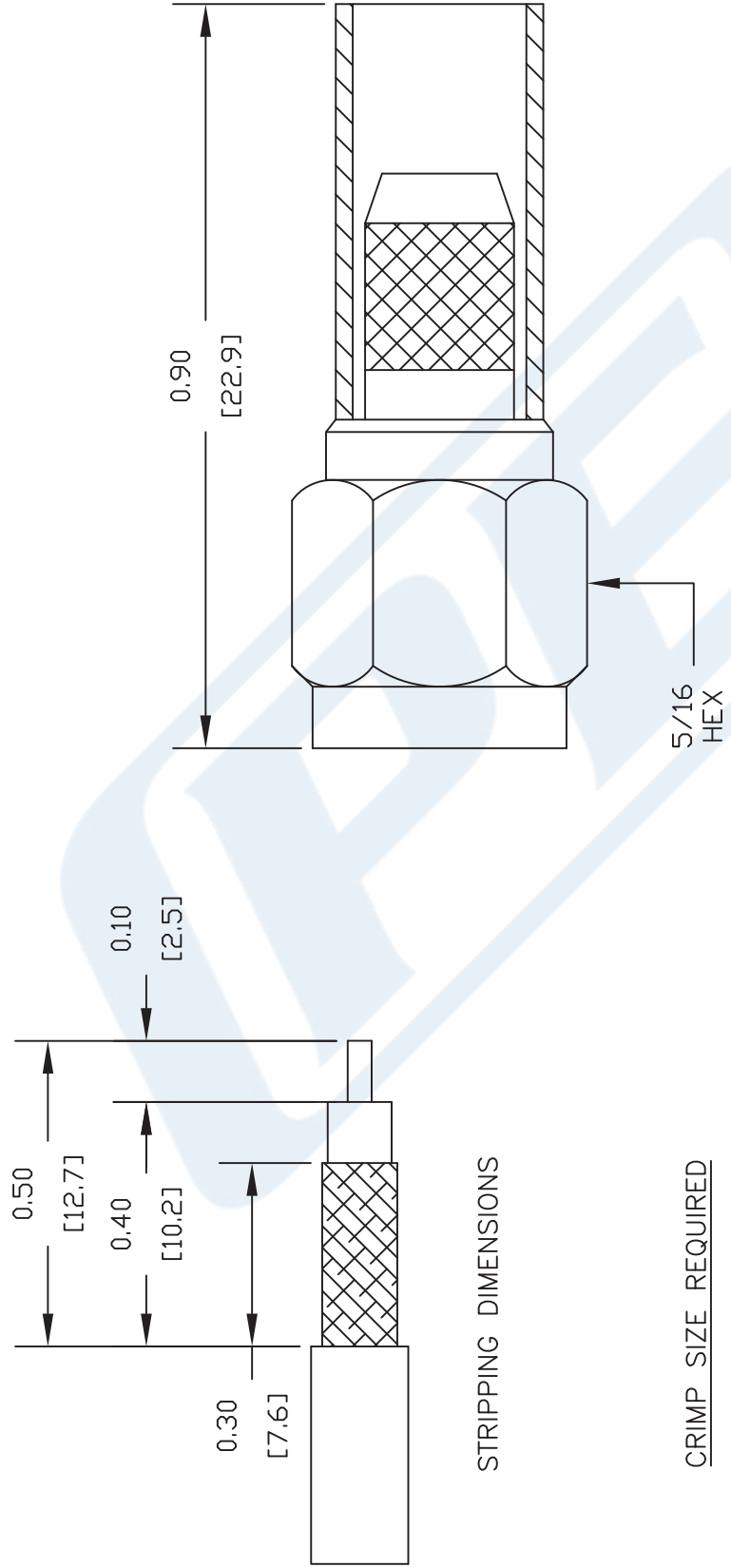
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, LMR-195, 0.195 inch PE4215](#)

URL: <https://www.pasternack.com/sma-male-standard-rg58-connector-pe4215-p.aspx>

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# PE4215 CAD Drawing

SMA Male Connector Crimp/Solder Attachment for RG58,  
RG303, RG141, PE-C195, LMR-195, 0.195 inch



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .213" HEX CRIMP TOOL

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.

DWG TITLE  
**PE4215**

**PE PASTERNAK®**  
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|        |                |                 |           |        |     |
|--------|----------------|-----------------|-----------|--------|-----|
| REV. - | FSCM NO. 53919 | CAD FILE 010611 | SCALE N/A | SIZE A | 127 |
|--------|----------------|-----------------|-----------|--------|-----|



## LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-195-UF

## Times Microwave Systems Coax Cable Specification

### Configuration

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

### Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 74% VoP
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 0.5 inches

### Applications

- RF Test Systems
- Antenna Installs
- Laboratory Applications
- General Purpose RF Interconnect
- Jumper Assemblies

### Description

LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-195-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-195-UF is constructed with a 0.195 inch diameter and Black TPE jacket.

LMR-195-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.195 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-195-UF TPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-195-UF coax cable provides specs for this wire on its RF coax cable LMR-195-UF datasheet.

LMR-195-UF cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss ultra flexible LMR-195-UF coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

### Electrical Specifications

| Description                          | Minimum | Typical   | Maximum | Units      |
|--------------------------------------|---------|-----------|---------|------------|
| Frequency Range                      | DC      |           | 5.8     | GHz        |
| Impedance                            |         | 50        |         | Ohms       |
| Velocity of Propagation              |         | 74        |         | %          |
| Time Delay                           |         | 1.27 4.17 |         | ns/ft ns/m |
| Shielding Effectiveness              | 90      |           |         | dB         |
| Dielectric Withstanding Voltage (DC) |         |           | 1,000   | Vdc        |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax LMR-195-UF](#)



## LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-195-UF

|                               |              |       |              |
|-------------------------------|--------------|-------|--------------|
| Jacket Spark                  |              | 3,000 | Vrms         |
| Inner Conductor DC Resistance |              | 9.5   | Ohms/1000ft  |
| Outer Conductor DC Resistance |              | 4.9   | Ohms/1000ft  |
| Nominal Capacitance           | 25.4 [83.33] |       | pF/ft [pF/m] |
| Nominal Inductance            | 0.064 [0.21] |       | uH/ft [uH/m] |
| Input Power (Peak)            |              | 2.5   | kWatts       |

#### Performance by Frequency Band

| Description           | F1   | F2    | F3  | F4    | F5    | Units    |
|-----------------------|------|-------|-----|-------|-------|----------|
| Frequency             | 50   | 150   | 220 | 450   | 900   | MHz      |
| Attenuation, Typ      | 3    | 5.3   | 6.4 | 9.3   | 13.2  | dB/100ft |
|                       | 9.84 | 17.39 | 21  | 30.51 | 43.31 | dB/100m  |
| Input Power (CW), Max | 610  | 350   | 280 | 200   | 140   | Watts    |

| Description           | F6    | F7    | F8    | F9    | F10   | Units    |
|-----------------------|-------|-------|-------|-------|-------|----------|
| Frequency             | 1.5   | 1.8   | 2     | 2.5   | 5.8   | GHz      |
| Attenuation, Typ      | 17.3  | 19    | 20.1  | 22.6  | 35.6  | dB/100ft |
|                       | 56.76 | 62.34 | 65.94 | 74.15 | 116.8 | dB/100m  |
| Input Power (CW), Max | 100   | 90    | 90    | 80    | 50    | Watts    |

#### Mechanical Specifications

|                                 |                          |
|---------------------------------|--------------------------|
| Diameter                        | 0.195 in 4.95 mm         |
| Weight                          | 0.021 lbs/ft [0.03 Kg/m] |
| Min. Bend Radius (Installation) | 0.5 in [12.7 mm]         |
| Min. Bend Radius (Repeated)     | 2 in [50.8 mm]           |
| Bending Moment                  | 0.1 lbs-ft [0.14 N-m]    |
| Tensile Strength                | 40 lbs [18.14 kg]        |
| Flat Plate Crush                | 10 lbs/in [0.18 Kg/mm]   |

#### Construction Specifications

| Description     | Material and Plating | Diameter           |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper, 1 Strand     | 0.038 in [0.97 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax LMR-195-UF](#)



LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax

RF Cables  
Technical Data Sheet



LMR-195-UF

|                |               |                    |
|----------------|---------------|--------------------|
| Conductor Type | Stranded      |                    |
| Dielectric     | Foam PE       | 0.11 in [2.79 mm]  |
| First Shield   | Aluminum Tape | [ ]                |
| Second Shield  | Tinned Copper | [ ]                |
| Jacket         | TPE, Black    | 0.195 in [4.95 mm] |

**Environmental Specifications**

**Temperature**

|                    |                  |
|--------------------|------------------|
| Operating Range    | -40 to +85 deg C |
| Installation 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:

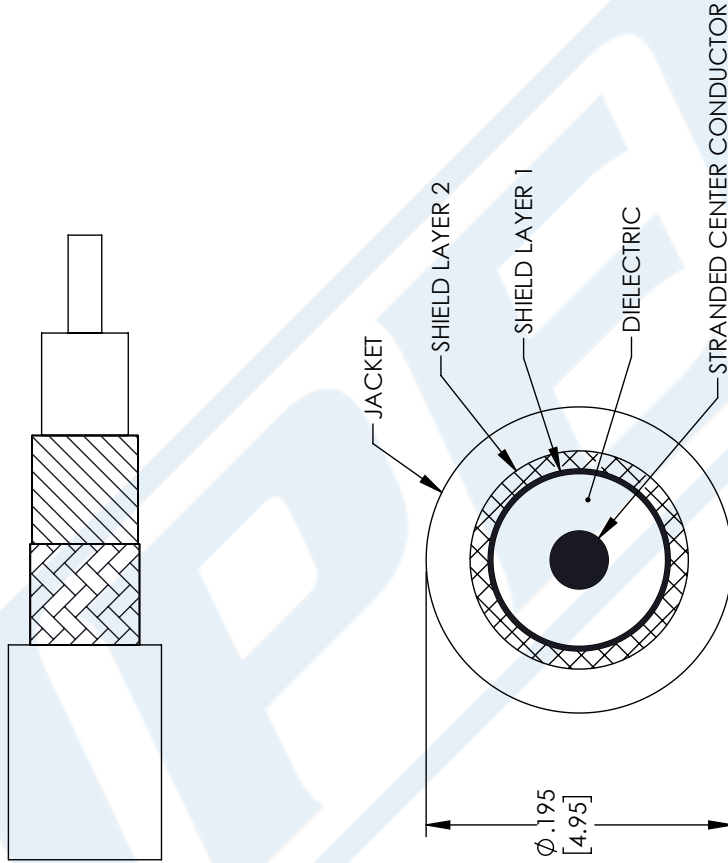
LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax LMR-195-UF](#)

URL: <https://www.pasternack.com/low-loss-flexible-lmr-195-uf-tpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-195-uf-p.aspx>

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| REVISIONS |                 |            |
|-----------|-----------------|------------|
| REV.      | DESCRIPTION     | DATE       |
| A         | INITIAL RELEASE | 06-04-2021 |
|           |                 | APPROVED   |
|           |                 | SELLIS     |



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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32  
 .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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
 an INFINITI brand

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ITEM NO. LMR-195-UF

SIZE A CAGE CODE 53919 DRAWN BY MVEERAPPAN

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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