



# N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195

## RF Connectors Technical Data Sheet



TC-195-NMH-RA-D

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: LMR-195, PE-C195

#### Features

- Max. Operating Frequency 6 GHz
- Gold Plated Brass Contact
- 50μ in. minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's TC-195-NMH-RA-D type N male right angle connector with crimp/solder attachment for LMR-195 and PE-C195 is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 6 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our type N male right angle connector TC-195-NMH-RA-D 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
Operating Voltage (AC)			750	Vrms
Dielectric Withstanding Voltage (AC)			1,000	Vrms

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 6				GHz
VSWR, Max	1.2:1	1.3:1				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195 TC-195-NMH-RA-D](#)



N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195

RF Connectors  
Technical Data Sheet



TC-195-NMH-RA-D

**Mechanical Specifications**

<b>Size</b>	
Length	1.2 in [30.48 mm]
Width/Dia.	0.8 in [20.32 mm]
Weight	0.093 lbs [42.18 g]
Mating Cycles	500 Cycles

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 50µ in. minimum
Insulation	Teflon	
Body	Brass	Tri-Metal 80µ in. minimum
Coupling Nut	Brass	Tri-Metal 80µ in. minimum

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-55 to +155 deg C
Shock	MIL-STD-202, Method 204, Condition B
Vibration	MIL-STD-202, Method 213, Condition B

**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: [N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195 TC-195-NMH-RA-D](#)



## N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195

### RF Connectors Technical Data Sheet



TC-195-NMH-RA-D

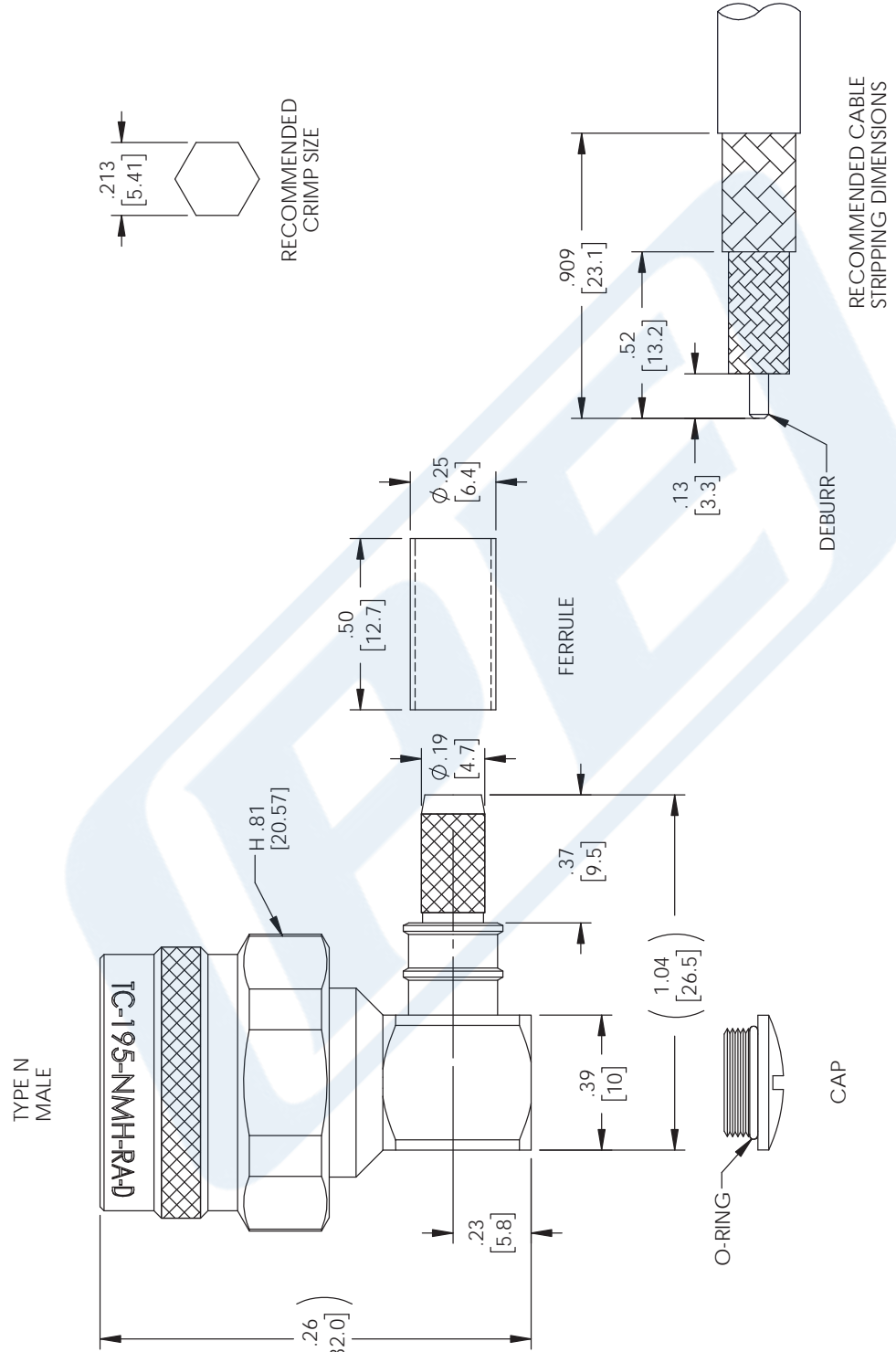
N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Connector Crimp/Solder Attachment for LMR-195, PE-C195 TC-195-NMH-RA-D](https://www.pasternack.com/n-male-lmr-195-pe-c195-connector-tc-195-nmh-ra-d-p.aspx)

URL: <https://www.pasternack.com/n-male-lmr-195-pe-c195-connector-tc-195-nmh-ra-d-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/03/2021	SELLIS



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

TOLERANCES:  
 X = +.2 [5.08] FRACTIONS  
 XX = +.02 [ .51 ] +.132  
 .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

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THIRD-ANGLE PROJECTION  
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 SHEET 1 OF 1  
 SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DFRISIELLO	TC-195-NMH-RA-D-PE
REV	A		

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

RF Connectors  
Technical Data Sheet

PE4405

**Configuration**

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch Interface Type
- Crimp/Solder Attachment
- 5/16 inch Hex

**Features**

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.4:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

**Applications**

- General Purpose Test
- Custom Cable Assemblies

**Description**

Pasternack's PE4405 SMA male right angle connector with crimp/solder 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 SMA male connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.4:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE4405 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	
Operating Voltage (AC)			500	Vrms

**Mechanical Specifications**

Size	
Length	0.8 in [20.32 mm]
Width/Dia.	0.315 in [8.00 mm]
Height	0.65 in [16.51 mm]
Weight	0.017 lbs [7.71 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 Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch PE4405](#)



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

RF Connectors  
Technical Data Sheet

PE4405

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 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 Right Angle Connector Crimp/Solder 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: [SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch PE4405](#)

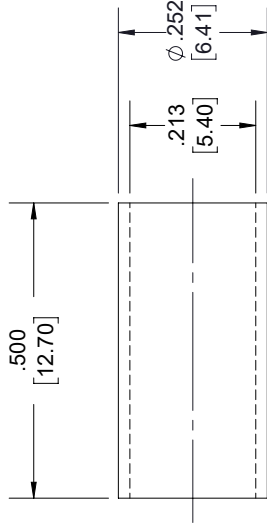
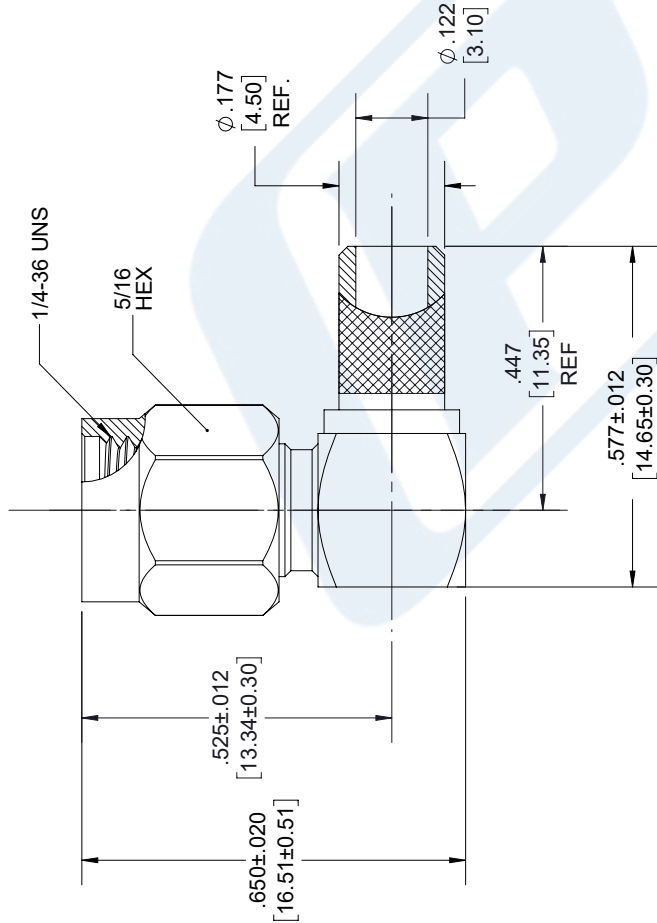
URL: <https://www.pasternack.com/sma-male-standard-rg58-connector-pe4405-p.aspx>

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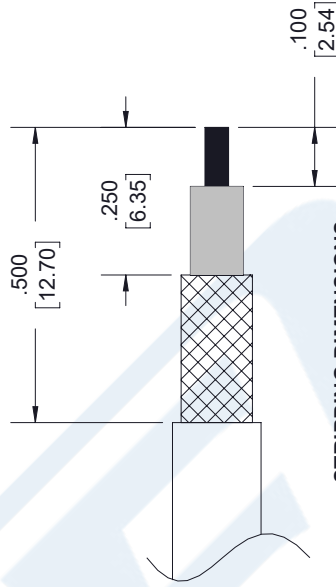
# PE4405 CAD Drawing

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.5	PCR PE4405 20190125	03/08/19	J.GARCIA



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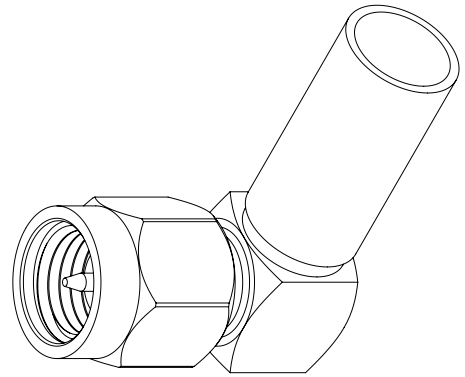
STRIPPING DIMENSIONS

NOTES:

- CABLE ATTACHMENT:
  - OUTER: CRIMP.
  - INNER: SOLDER.
- CRIMP SIZE REQUIRED:
  - FERRULE: .213" HEX. CRIMP TOOL
  - CONTACT: SOLDER.



CAP



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
.XX±.01 [0.25]	±.132
.XXX±.005 [0.13]	±.132
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SHEET 1 OF 2  
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SIZE [CAGE] DRAWN BY PART NUMBER REV  
A 53919 K.DANG PE4405 1.5

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## 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:

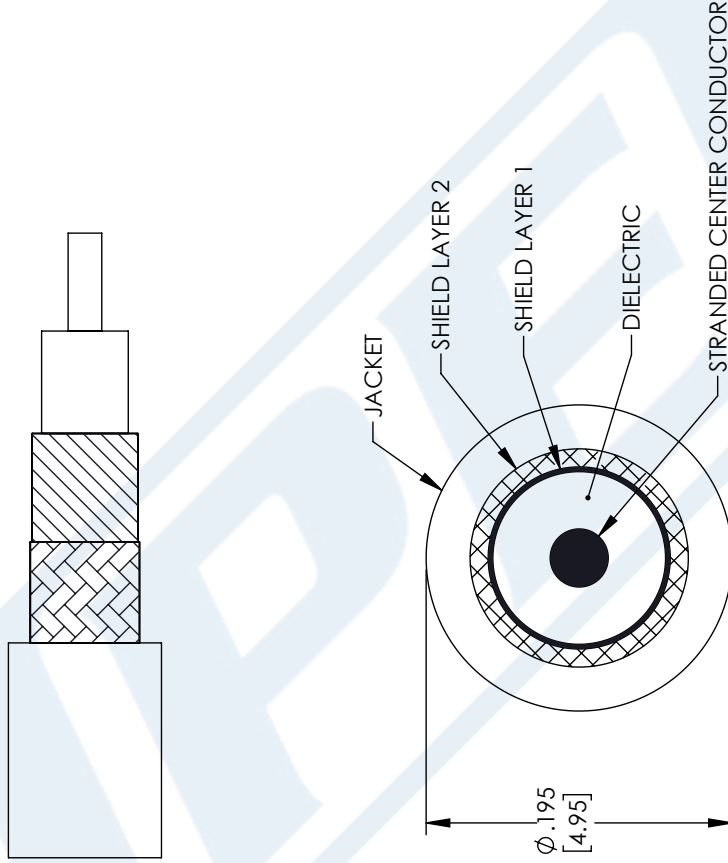
LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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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



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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

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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

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