



TNC Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195 Coax

TECHNICAL DATA SHEET

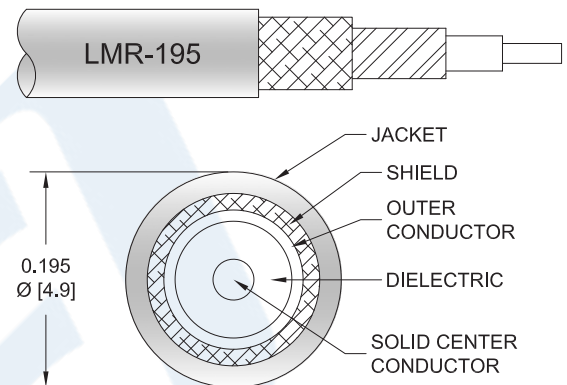
PE3W03419

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: TNC Female Bulkhead
- Cable Type: LMR-195
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03419 TNC male right angle to TNC female bulkhead cable using LMR-195 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack TNC to TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-195 coax. The PE3W03419 TNC male to TNC female cable assembly operates to 4 GHz. The right angle TNC interface on the LMR-195 cable allows for easier connections in tight spaces. Our RF cable assembly with TNC bulkhead interface 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. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

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 to TNC Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3W03419](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω /1000ft [Ω /Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3W03419	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.12	0.24	dB/ft	
			0.12	0.19	0.27	0.39	0.78	dB/m	
PE3W03419-12	12 inch	Insertion Loss (Typ.)	0.34	0.36	0.39	0.42	0.54	dB	0.142
PE3W03419-24	24 inch	Insertion Loss (Typ.)	0.37	0.42	0.47	0.54	0.78	dB	0.165
PE3W03419-36	36 inch	Insertion Loss (Typ.)	0.41	0.48	0.55	0.66	1.02	dB	0.187
PE3W03419-48	48 inch	Insertion Loss (Typ.)	0.44	0.53	0.63	0.77	1.25	dB	0.209
PE3W03419-60	60 inch	Insertion Loss (Typ.)	0.48	0.59	0.71	0.89	1.49	dB	0.231

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.142 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight 0.142 lbs [64.41 g]

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Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle Threaded	TNC Female Bulkhead Threaded
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	

Environmental Specifications

Temperature

Operating Range: -40 to +85 deg C

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

Plotted and Other Data

Notes:

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TECHNICAL DATA SHEET

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How to Order

Part Number Configuration:

PE3W03419

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W03419-12 = 12 inches long cable
PE3W03419-100cm = 100 cm long cable

TNC Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195 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.

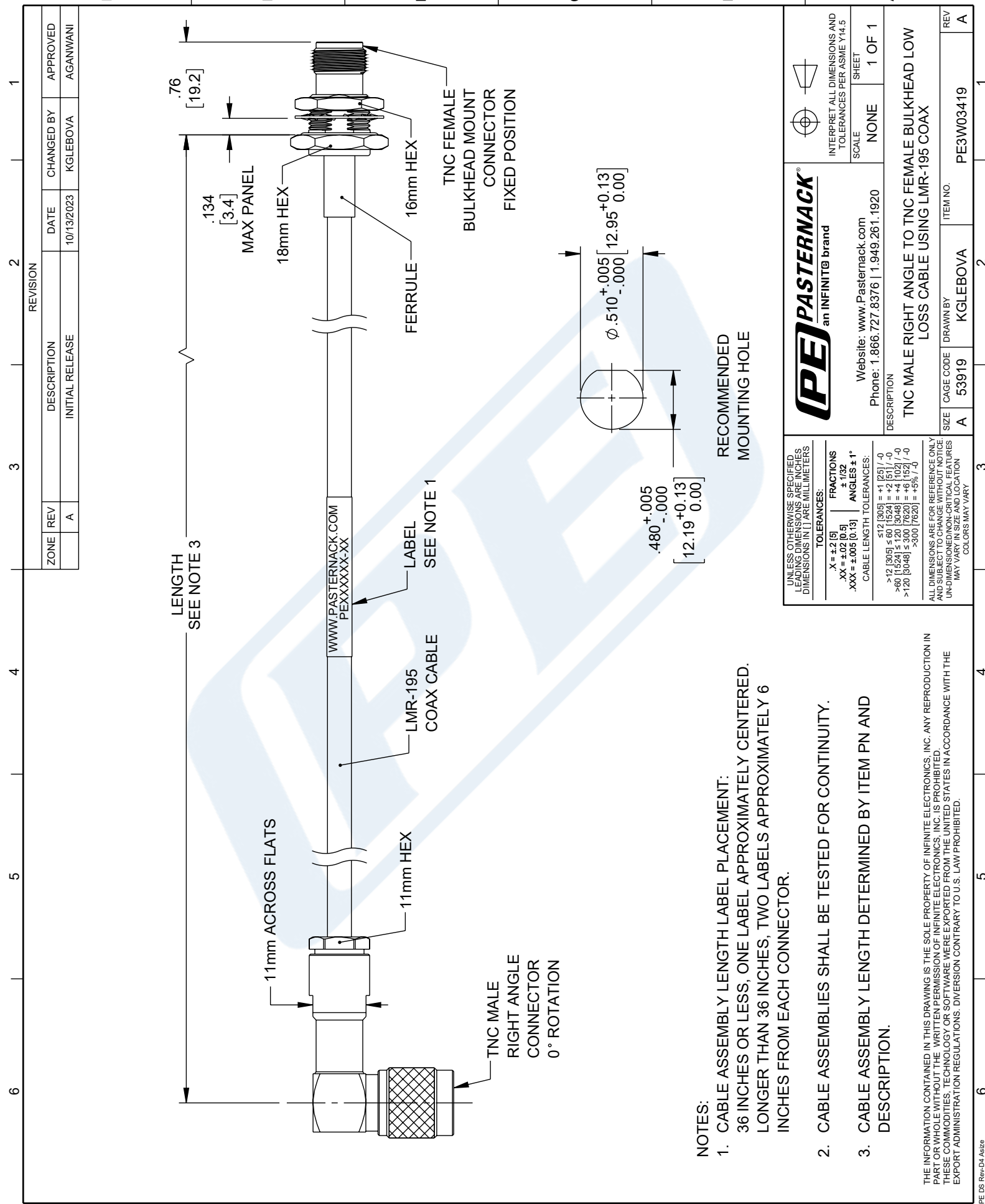
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URL: <https://www.pasternack.com/tnc-male-right-angle-to-tnc-female-bulkhead-low-loss-cable-using-lmr-195-pe3w03419-p.aspx>

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.

PE3W03419 CAD Drawing

TNC Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195 Coax



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/13/2023	KGLEBOVA	AGANWANI

REVISION	1	2	3	4	5	6

LENGTH SEE NOTE 3

11mm ACROSS FLATS

11mm HEX

18mm HEX

16mm HEX

FERRULE

WWW.PASTERNAK.COM
PEXXXX-XX

LABEL
SEE NOTE 1

LMR-195
COAX CABLE

TNC MALE
RIGHT ANGLE
CONNECTOR
0° ROTATION

TNC FEMALE
BULKHEAD MOUNT
CONNECTOR
FIXED POSITION

RECOMMENDED
MOUNTING HOLE

Ø .510^{+0.005}_{-0.000} [12.95^{+0.13}_{0.00}]

.480^{+0.005}_{-0.000} [12.19^{+0.13}_{0.00}]

.134 [3.4]

.76 [19.2]

MAX PANEL

NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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TOLERANCES:	
X = ± 2 [5]	FRACTIONS ± 1/32
.XX = ± 02 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305] ≤ 60 [1524]	= +1 [25] / -0
>60 [1524] ≤ 120 [3048]	= +2 [51] / -0
>120 [3048] ≤ 300 [7620]	= +4 [102] / -0
>300 [7620]	= +5 [127] / -0

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	
SCALE	NONE
SHEET	1 OF 1
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	

DESCRIPTION	SIZE	CABLE CODE	DRAWN BY	ITEM NO.	REV
TNC MALE RIGHT ANGLE TO TNC FEMALE BULKHEAD LOW LOSS CABLE USING LMR-195 COAX	A	53919	KGLEBOVA	PE3W03419	A