



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

### TECHNICAL DATA SHEET

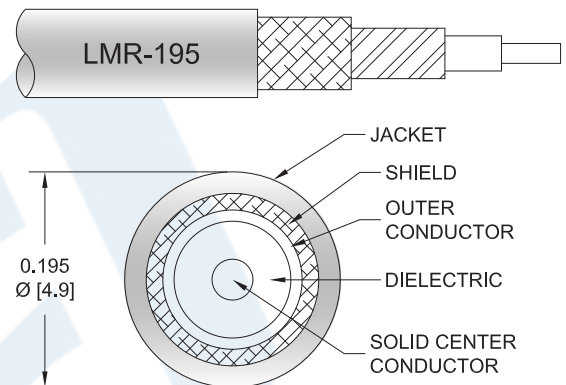
PE3C4609

#### Configuration

- Connector 1: TNC Male
- 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 PE3C4609 TNC male 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 PE3C4609 TNC male to TNC female cable assembly operates to 4 GHz. 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 to TNC Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3C4609](#)



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

### TECHNICAL DATA SHEET

**PE3C4609**

#### 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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega$ /1000ft [ $\Omega$ /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	
PE3C4609	Custom Lengths Available	Insertion Loss (Typ.)	0.03	0.06	0.08	0.12	0.24	dB/ft	
			0.12	0.19	0.27	0.39	0.79	dB/m	
PE3C4609-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.32	0.44	dB	0.095
PE3C4609-24	24 inch	Insertion Loss (Typ.)	0.27	0.32	0.37	0.44	0.68	dB	0.118
PE3C4609-36	36 inch	Insertion Loss (Typ.)	0.31	0.38	0.45	0.55	0.92	dB	0.14
PE3C4609-48	48 inch	Insertion Loss (Typ.)	0.34	0.43	0.53	0.67	1.16	dB	0.162
PE3C4609-60	60 inch	Insertion Loss (Typ.)	0.37	0.49	0.61	0.78	1.4	dB	0.184

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:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.095 pounds
Additional Weight per Inch:	0.00184 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.095 lbs [43.09 g]

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

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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 Threaded	TNC Female Bulkhead Threaded
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Silver	

#### 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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Loss Cable Using LMR-195 Coax

**TECHNICAL DATA SHEET**

**PE3C4609**

**How to Order**

Part Number Configuration:

**PE3C4609**

- **xx**

**uu**

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

Example: PE3C4609-12 = 12 inches long cable  
PE3C4609-100cm = 100 cm long cable

TNC Male 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.

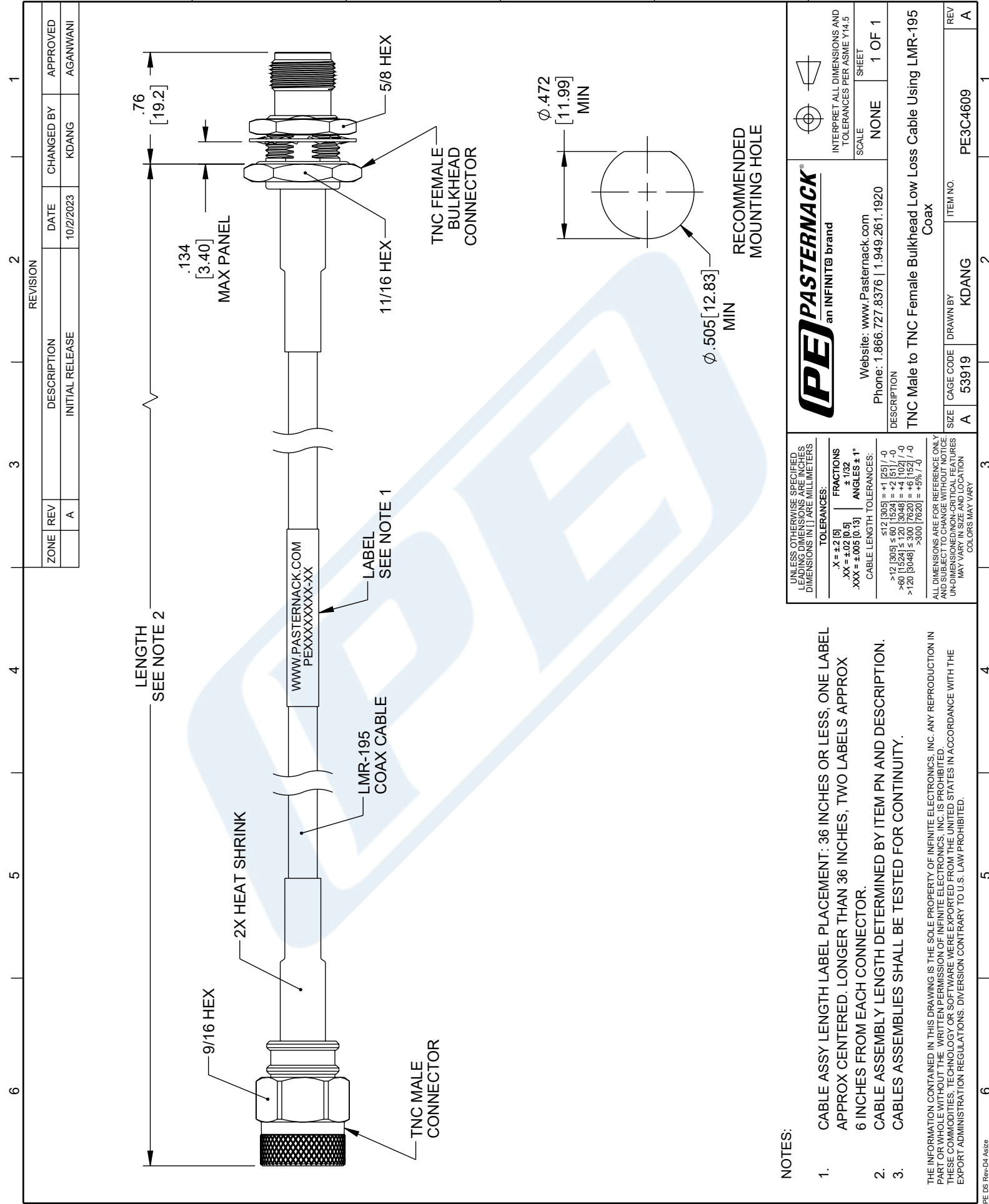
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URL: <https://www.pasternack.com/tnc-male-to-tnc-female-bulkhead-low-loss-cable-using-lmr-195-pe3c4609-p.aspx>

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.

# PE3C4609 CAD Drawing

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



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/2/2023	KDANG	AGANWANI

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

TOLERANCES:	FRACTIONS	ANGLES
.X = ±.2 [5]	± 1/32	ANGLES ± 1°
.XX = ±.02 [0.5]		
.XXX = ±.005 [0.13]		

CABLE LENGTH TOLERANCES:

<12 [305]	±.1 [2.5]
>12 [305] ≤ 60 [1524]	±.2 [5.1]
>60 [1524] ≤ 120 [3048]	±.4 [10.2]
>120 [3048]	±.8 [20.3]

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

NOTES:

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

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Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

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

SCALE	NONE	SHEET	1 OF 1
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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
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SIZE	CABLE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3C4609