



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

### RF Cable Assemblies Technical Data Sheet

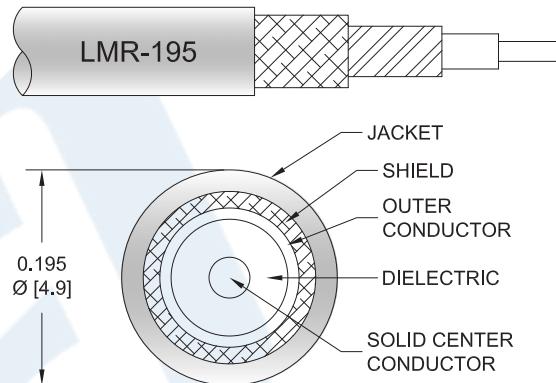
**PE3W06109**

#### Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: TNC Female
- Cable Type: LMR-195

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W06109 TNC male right angle to TNC female 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 PE3W06109 TNC male to TNC female cable assembly operates to 3 GHz. The right angle TNC interface on the LMR-195 cable allows for easier connections in tight spaces. 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 Low Loss Cable Using LMR-195 Coax PE3W06109](#)



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

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	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

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.035	0.057	0.082	0.117	0.207	dB/ft
	0.11	0.19	0.27	0.38	0.68	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.05 \times \text{SQRT}(f\text{GHz})$  dB for the right angle connector and 0.1 dB for the straight connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.12 lbs [54.43 g]

##### 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]

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

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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	TNC Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 $\mu$ in minimum	30 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 $\mu$ in minimum	100 $\mu$ in minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 $\mu$ in 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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## TNC Male Right Angle to TNC Female Low Loss Cable Using LMR-195 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3W06109**

#### How to Order

Part Number Configuration:

**PE3W06109**

- **xx**

**uu**

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

Example: PE3W06109-12 = 12 inches long cable  
PE3W06109-100cm = 100 cm long cable

TNC Male Right Angle to TNC Female 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.

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 Low Loss Cable Using LMR-195 Coax PE3W06109](#)

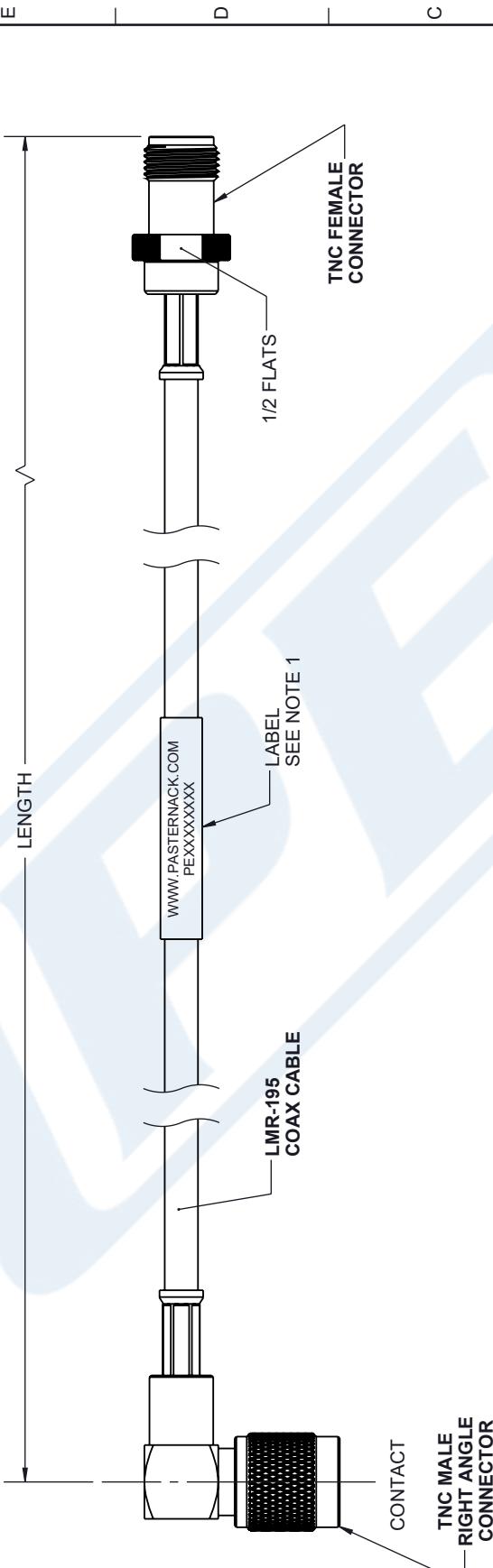
URL: <https://www.pasternack.com/tnc-male-right-angle-to-tnc-female-low-loss-cable-using-lmr-195-pe3w06109-p.aspx>

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.

PE3W06109 CAD Drawing

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

REVISION		DESCRIPTION	DATE	CHANGED BY	APPROVED
ZZONE	REV.	INITIAL RELEASE	12/16/2022	KDANG	AGANWAN



**NOTES:**

1. 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.  
2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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 <b>PASTERNACK®</b> an INFINITI® brand				INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5							
OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES UNLESS IN MILLIMETERS	FRACTIONS: <table border="1" data-bbox="1308 278 1325 399"> <tr> <td>[5]</td><td>± 1/32</td></tr> <tr> <td>2</td><td>[.13]</td></tr> <tr> <td>2</td><td>[.5]</td></tr> </table>	[5]	± 1/32	2	[.13]	2	[.5]	ANGLES ± 1°	SCALE NONE	1 OF 1	REV A
[5]	± 1/32										
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LENGTH TOLERANCES:	Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		SHEET 1								
DESCRIPTION <b>TNC Male Right Angle to TNC Female Low Loss Cable Using LMR-195 Coax</b>		ITEM NO. PE3W06109									
SIZE A	CAGE CODE 53919	DRAWN BY KDANG									
<small>NOTES ARE FOR REFERENCE ONLY DO NOT CHANGE WITHOUT NOTICE.</small>											