



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

TECHNICAL DATA SHEET

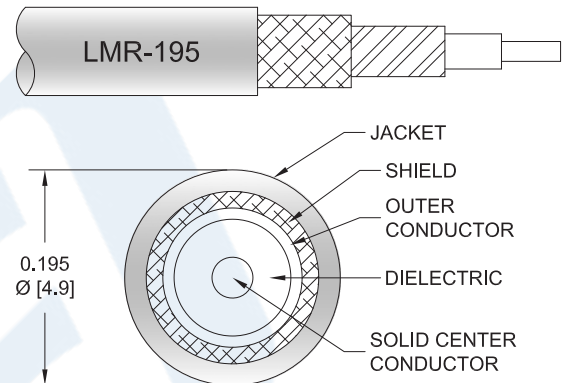
PE3W04810

Configuration

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

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W04810 TNC female bulkhead to MCX plug right angle 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 MCX cable assembly has a female to plug gender configuration with 50 ohm flexible LMR-195 coax. The PE3W04810 TNC female to MCX plug cable assembly operates to 3 GHz. The right angle MCX 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 Female Bulkhead to MCX Plug Right Angle Low Loss Cable Using LMR-195 Coax PE3W04810](#)



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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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			100	250	500	1000	3000	MHz	
PE3W04810	Custom Lengths Available	Insertion Loss (Typ.)	0.03	0.06	0.08	0.12	0.21	dB/ft	
			0.12	0.19	0.27	0.39	0.68	dB/m	
PE3W04810-12	12 inch	Insertion Loss (Typ.)	0.34	0.36	0.39	0.42	0.51	dB	0.065
PE3W04810-24	24 inch	Insertion Loss (Typ.)	0.37	0.42	0.47	0.54	0.72	dB	0.088
PE3W04810-36	36 inch	Insertion Loss (Typ.)	0.41	0.48	0.55	0.65	0.92	dB	0.11
PE3W04810-48	48 inch	Insertion Loss (Typ.)	0.44	0.53	0.63	0.77	1.13	dB	0.132
PE3W04810-60	60 inch	Insertion Loss (Typ.)	0.47	0.59	0.71	0.88	1.33	dB	0.154

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:	0.2 dB
Base Weight:	0.065 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight 0.065 lbs [29.48 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 Female Bulkhead Threaded	MCX Plug Right Angle Push-On
Specification	MIL-STD-348A	CECC 22220
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

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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How to Order

Part Number Configuration:

PE3W04810

- **xx**

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

Example: PE3W04810-12 = 12 inches long cable
PE3W04810-100cm = 100 cm long cable

TNC Female Bulkhead to MCX Plug Right Angle 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.

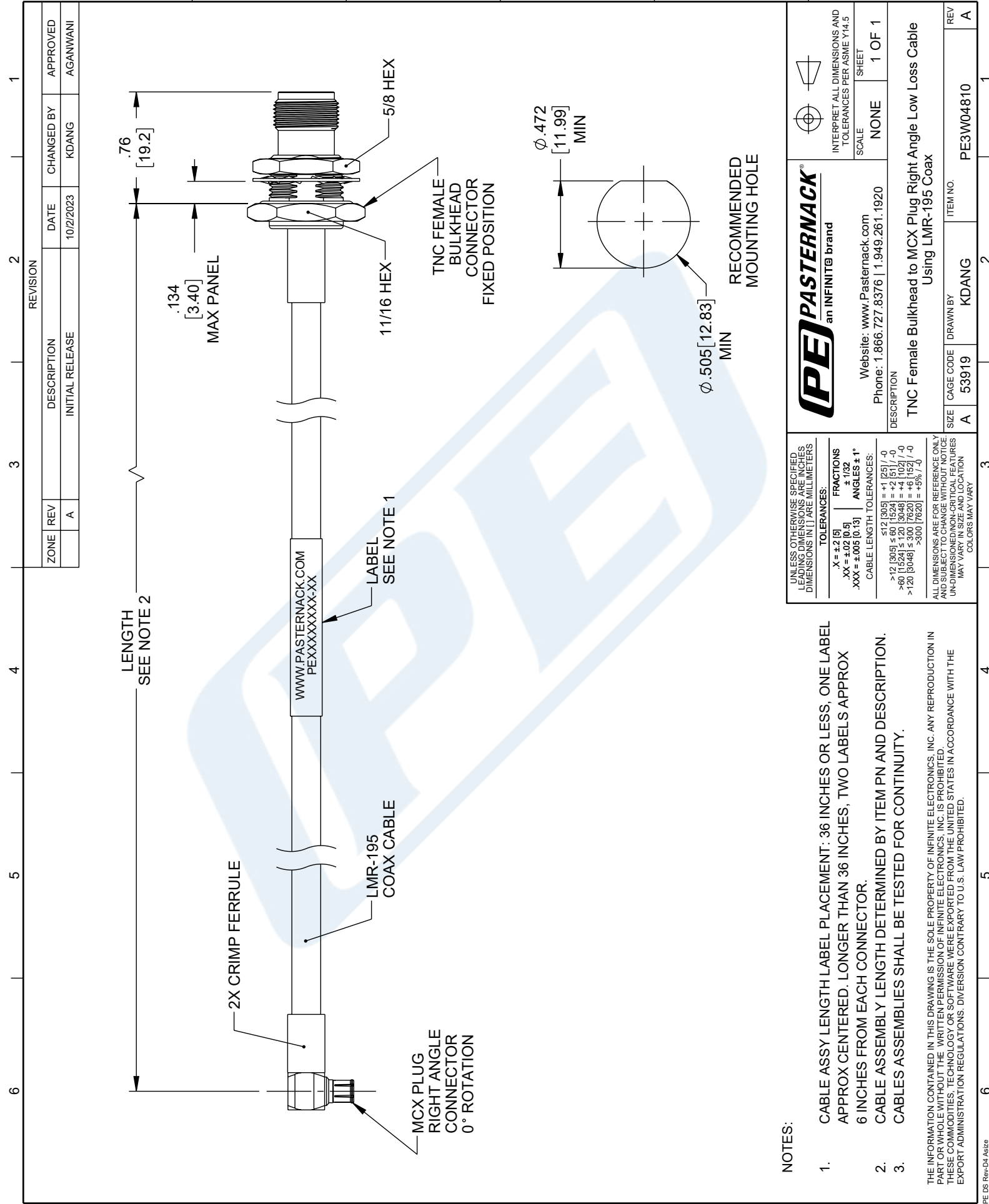
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URL: <https://www.pasternack.com/tnc-female-bulkhead-to-mcx-plug-right-angle-low-loss-cable-using-lmr-195-pe3w04810-p.aspx>

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PE3W04810 CAD Drawing

TNC Female Bulkhead to MCX Plug Right Angle 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:
 X = ± 2 [5]
 .XX = ± 02 [0.5]
 .XXX = ± 005 [0.13]

FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] = ± 1 [25] / -0
 > 12 [305] ≤ 60 [1524] = ± 2 [51] / -0
 > 60 [1524] ≤ 120 [3048] = ± 4 [102] / -0
 > 120 [3048] ≤ 300 [7620] = ± 8 [203] / -0
 > 300 [7620] = ± 9 [228] / -0

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

NOTE: 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. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
 3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

Website: www.Pasternack.com
 Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION
 TNC Female Bulkhead to MCX Plug Right Angle Low Loss Cable Using LMR-195 Coax

SIZE A 53919 DRAWN BY KDANG ITEM NO. PE3W04810 REV A

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PE DS Rev-D4 Asize

PE3W04810 REV 1.0

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