

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



PE3W13717

Configuration

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

Features

- Max Frequency 4 MHz
- Shielding Effectivity > 90 dB
- 74% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W13717 TNC female bulkhead to SMA male right angle cable using LMR-195-UF 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 SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-195-UF coax. The PE3W13717 TNC female to SMA male cable assembly operates to 4 MHz. The right angle SMA interface on the LMR-195-UF 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		74		%
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		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W13717	Custom Lengths Available	Insertion Loss (Typ.)	0.042	0.068	0.097	0.132	0.285	dB/ft	
			0.14	0.23	0.32	0.44	0.94	dB/m	
PE3W13717-12	12 Inch	Insertion Loss (Typ.)	0.35	0.37	0.4	0.44	0.59	dB	0.07
PE3W13717-24	24 Inch	Insertion Loss (Typ.)	0.39	0.44	0.5	0.57	0.87	dB	0.091
PE3W13717-36	36 Inch	Insertion Loss (Typ.)	0.43	0.51	0.6	0.7	1.16	dB	0.112
PE3W13717-60	60 Inch	Insertion Loss (Typ.)	0.51	0.64	0.79	0.96	1.73	dB	0.154
PE3W13717-300	300 Inch	Insertion Loss (Typ.)	1.35	2	2.73	3.6	7.43	dB	0.574

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:	0.07 pounds
Additional Weight per Inch:	0.00175 pounds

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.049 lbs [22.23 g]

Cable

Cable Type	LMR-195-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	TPE, 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	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Female Bulkhead	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 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
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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PE3W13717

Typical Performance Data

How to Order

Part Number Configuration:

PE3W13717

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W13717-12 = 12 inches long cable
PE3W13717-100cm = 100 cm long cable

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

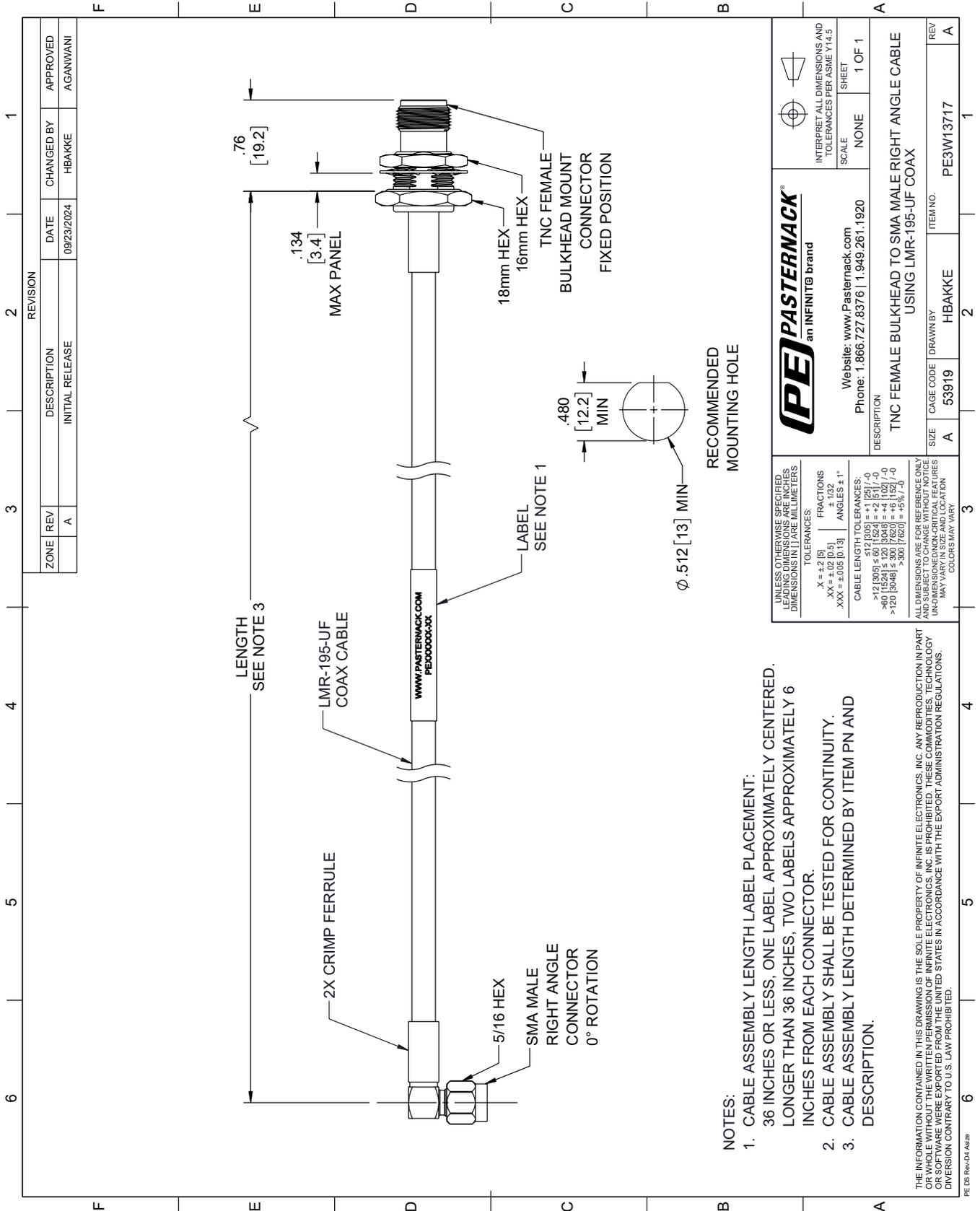
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-195-UF Coax PE3W13717](https://www.pasternack.com/tnc-female-bulkhead-to-sma-male-right-angle-low-loss-cable-using-lmr-195-uf-pe3w13717)

URL: <https://www.pasternack.com/tnc-female-bulkhead-to-sma-male-low-loss-cable-using-lmr-195-uf-pe3w13717-p.aspx>

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PE3W13717 CAD Drawing

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NOTES:

1. 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.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/23/2024	HBAKKE	AGANWANI

PASTERNAK an INFINIT® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: TNC FEMALE BULKHEAD TO SMA MALE RIGHT ANGLE CABLE USING LMR-195-UF COAX		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3W13717