PASTERNACK
an INFINITE brand

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

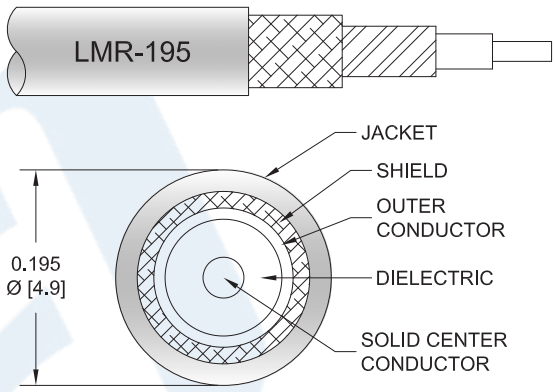
TECHNICAL DATA SHEET PE3W02414

Configuration

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

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02414 TNC male 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 PE3W02414 TNC male to TNC female cable assembly operates to 5.8 GHz. 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 Low Loss Cable Using LMR-195 Coax PE3W02414

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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	250	500	1000	2500	5800	MHz	
PE3W02414	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.08	0.12	0.19	0.3	dB/ft	
			0.19	0.27	0.39	0.63	0.99	dB/m	
PE3W02414-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.111
PE3W02414-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.134
PE3W02414-36	36 inch	Insertion Loss (Typ.)	0.38	0.45	0.55	0.77	1.1	dB	0.156
PE3W02414-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.178
PE3W02414-60	60 inch	Insertion Loss (Typ.)	0.49	0.61	0.78	1.15	1.7	dB	0.2

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:	0.111 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight	0.111 lbs [50.35 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 Threaded	TNC Female Threaded
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		30 µ inches minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		100 µ inches minimum
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µ inches 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

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Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration: **PE3W02414 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3W02414 — Base Number

Example: PE3W02414-12 = 12 inches long cable
PE3W02414-100cm = 100 cm long cable

TNC Male 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 to TNC Female Low Loss Cable Using LMR-195 Coax PE3W02414

URL: https://www.pasternack.com/tnc-male-to-tnc-female-low-loss-cable-using-lmr-195-pe3w02414-p.aspx

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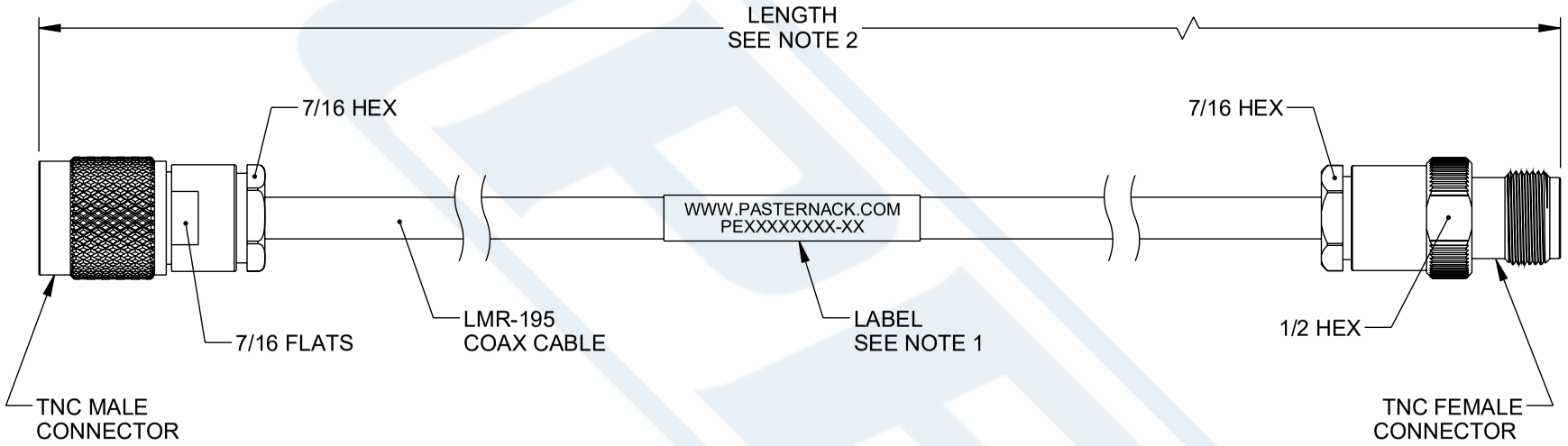
REVISION					
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/2/2023	KDANG	AGANWANI



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

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

TOLERANCES:

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

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] = +6 [152] / -0
>300 [7620] = +5% / -0

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

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

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

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE3W02414	A

PE3W02414 CAD Drawing

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PE3W02414 REV 1.0

PE DS Rev-D4 Asize