

## TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink



### PE3W17294/HS

#### Configuration

- Connector 1: TNC Female
- Connector 2: TNC Male Right Angle
- Cable Type: LMR-240
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W17294/HS TNC female to TNC male right angle cable using LMR-240 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 female to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3W17294/HS TNC female to TNC male cable assembly operates to 6 GHz. The right angle TNC interface on the LMR-240 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.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

## TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink



### PE3W17294/HS

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W17294/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.024	0.039	0.056	0.076	0.161	dB/ft	
			0.08	0.13	0.19	0.25	0.53	dB/m	
PE3W17294/HS-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.28	0.37	dB	0.11
PE3W17294/HS-24	24 inch	Insertion Loss (Typ.)	0.25	0.28	0.32	0.36	0.53	dB	0.143
PE3W17294/HS-36	36 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.43	0.69	dB	0.176
PE3W17294/HS-48	48 inch	Insertion Loss (Typ.)	0.3	0.36	0.43	0.51	0.85	dB	0.209
PE3W17294/HS-60	60 inch	Insertion Loss (Typ.)	0.32	0.4	0.48	0.58	1.01	dB	0.242

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:	0.11 pounds
Additional Weight per Inch:	0.00275 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.077 lbs [34.93 g]

##### Cable

Cable Type	LMR-240
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	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink



**PE3W17294/HS**

**Connectors**

Description	Connector 1	Connector 2
Type	TNC Female	TNC Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	500	
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification	30μ Minimum	
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200μ In.	
Coupling Nut Material and Plating		Brass, Nickel
Torque	20 in-lbs 2.26 Nm	

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

## TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink



### PE3W17294/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W17294/HS - xx uu**

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

Example: PE3W17294/HS-12 = 12 inches long cable  
PE3W17294/HS-100cm = 100 cm long cable

TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink 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 to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink PE3W17294/HS](#)

URL: <https://www.pasternack.com/tnc-female-to-tnc-male-low-loss-cable-using-lmr-240-with-heatshrink-pe3w17294-hs-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3W17294/HS CAD Drawing

TNC Female to TNC Male Right Angle Low Loss Cable Using LMR-240 Coax with HeatShrink

