

## TNC Male to SMA Male Low Loss Cable Using LMR-240-DB Coax with HeatShrink



### RF Cable Assemblies Technical Data Sheet

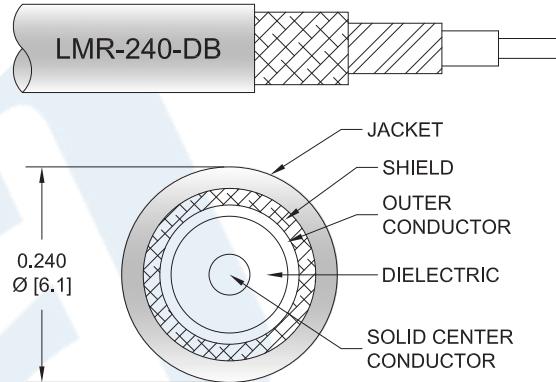
**PE3W08990/HS**

#### Configuration

- Connector 1: TNC Male
- Connector 2: SMA Male
- Cable Type: LMR-240-DB

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W08990/HS TNC male to SMA male cable using LMR-240-DB 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 male to male gender configuration with 50 ohm flexible LMR-240-DB coax. The PE3W08990/HS TNC male to SMA male 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 SMA Male Low Loss Cable Using LMR-240-DB Coax with HeatShrink PE3W08990/HS](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω/1000ft [Ω/Km]
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft
	0.13	0.18	0.26	0.42	0.67	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.097 lbs [44 g]

##### Cable

Cable Type LMR-240-DB  
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]

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Bending Moment  
Flat Plate Crush  
Tensile Strength

0.25 lbs-ft [0.34 N-m]  
20 lbs/in [0.36 Kg/mm]  
80 lbs [36.29 Kg]

#### Connectors

Description	Connector 1	Connector 2
Type	TNC Male	SMA Male
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Gold
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Gold
Hex Size		5/16 inch
Torque		3 in-lbs [0.34 Nm]

#### 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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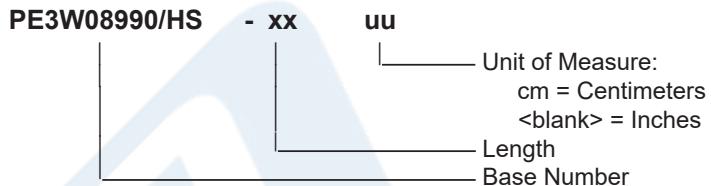


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**PE3W08990/HS**

#### How to Order

Part Number Configuration:



Example: PE3W08990/HS-12 = 12 inches long cable  
PE3W08990/HS-100cm = 100 cm long cable

TNC Male to SMA Male Low Loss Cable Using LMR-240-DB 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.

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URL: <https://www.pasternack.com/tnc-male-to-sma-male-low-loss-cable-using-lmr-240-db-with-heatshrink-pe3w08990-hs-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.

# PE3W08990/HS CAD Drawing

TNC Male to SMA Male Low Loss Cable Using LMR-240-DB Coax with HeatShrink

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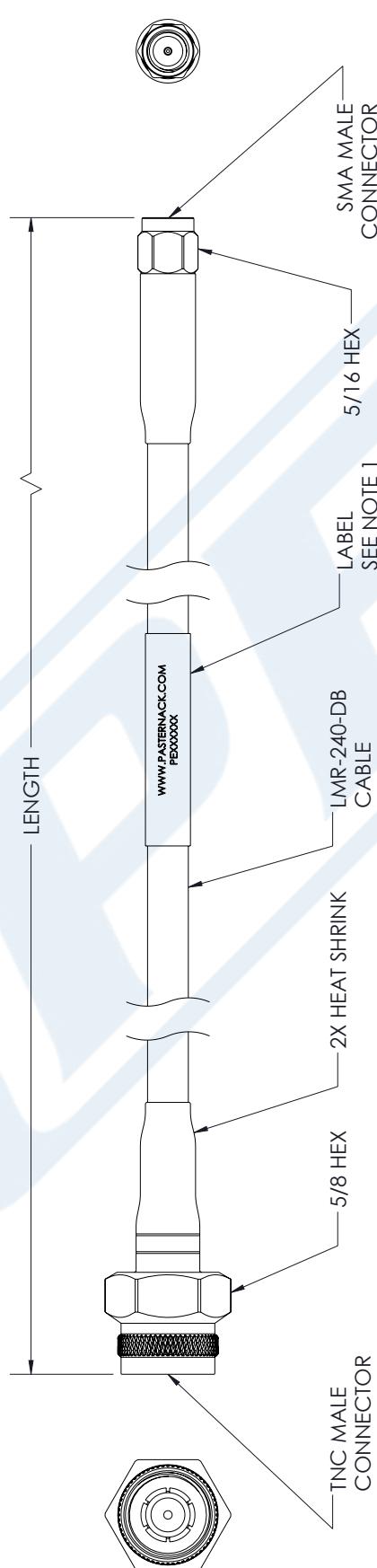
E

D

C

B

A



ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
A	A	INITIAL RELEASE	12/23/2022	AKRESSOWSKI	SRAUTUS

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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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 <b>PASTERNAK</b> an INFINITI® brand	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
	SCALE NONE	SHOOT 1 OF 1
DESCRIPTION TNC MALE TO SMA MALE LOW LOSS CABLE USING LMR-240-DB COAX WITH HEATSHRINK	WEBSITE: <a href="http://www.pasternack.com">www.pasternack.com</a> PHONE: 1.866.727.8376   1.949.261.1920	REV A
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS		
TOLERANCES: X = $\pm 0.2$ [ 5.0 ] FRACTIONS XX = $\pm 0.02$ [ .5 ] + 1/32 .XXX = $\pm 0.005$ [ .13 ] ANGLES $\pm 1^\circ$ CABLE LENGTH TOLERANCES: >12 [305] = +1 [25] / -0 >12 [305] = +2 [51] / -0 >60 [1524] = +2 [102] / -0 >60 [1524] < 120 [3048] = +4 [102] / -0 >120 [3048] < 300 [7620] = +6 [152] / -0 >120 [3048] = +8% / -0 >300 [7620] = +8% / -0		