

TNC Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-DB Coax with HeatShrink, LF Solder



RF Cable Assemblies Technical Data Sheet

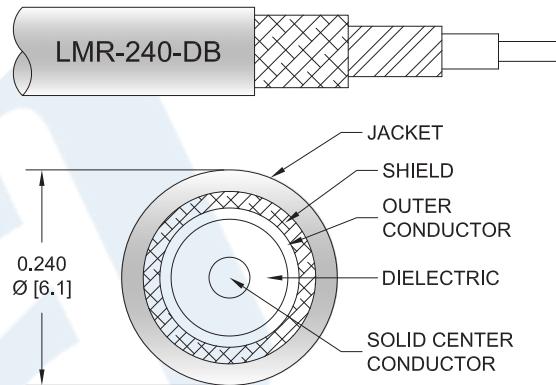
PE3W13081LF/HS

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: SMA Male Right Angle
- 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 PE3W13081LF/HS TNC male right angle to SMA male right angle 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 PE3W13081LF/HS TNC male to SMA male cable assembly operates to 5.8 GHz. The right angle TNC and right angle SMA interfaces on the LMR-240-DB cable allow 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-DB Coax with HeatShrink, LF Solder PE3W13081LF/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
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]		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	0.55	0.079	0.129	0.204	dB/ft
	0.13	1.8	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 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight	0.106 lbs [48.08 g]
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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]
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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]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle	SMA Male Right Angle
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass/Phosphor Bronze, Gold
Contact Plating Specification		50 μ inch
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 μ inch
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification		80 μ inch
Hex Size		16-May Inch
Torque		7 in-lbs [0.79 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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RF Cable Assemblies Technical Data Sheet

PE3W13081LF/HS

How to Order

Part Number Configuration:

PE3W13081LF/HS - xx

uu

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

Example: PE3W13081LF/HS-12 = 12 inches long cable
PE3W13081LF/HS-100cm = 100 cm long cable

TNC Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-DB Coax with HeatShrink, LF Solder 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.

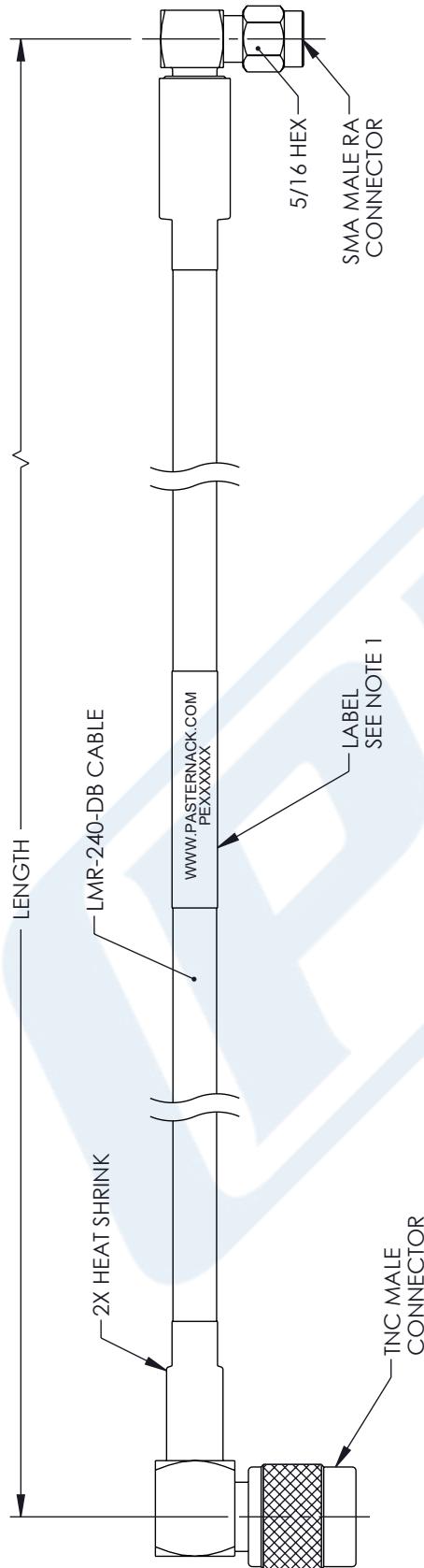
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URL: <https://www.pasternack.com/tnc-male-right-angle-to-sma-male-low-loss-cable-using-lmr-240-db-with-heatshrink-lf-solder-pe3w13081lf-hs-p.aspx>

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.

PE3W13081LF/HS CAD Drawing

TNC Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-DB Coax with HeatShrink, LF Solder



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.

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2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

 PASTERNACK® an INFINIT® brand		 	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5			
		SCALE	NONE
		1 OF 1	
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		DESCRIPTION TNC MALE RIGHT ANGLE TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING LMR240-DB COAX WITH HEATSHRINK LF SOLDER	
TOLERANCES: $X = \pm 0.2$ [5] $XX = \pm 0.02$ [0.5] $XXX = \pm 0.005$ [0.13]		CABLE LENGTH TOLERANCES: $\gt 12$ [305] = ± 1 [25] -0 $\gt 12$ [305] \leq 120 [304.8] = ± 4 [102] -0 $\gt 60$ [152.4] \leq 120 [304.8] = ± 6 [152] -0 $\gt 120$ [304.8] \leq 300 [762] = ± 6 [152] -0 $\gt 300$ [762] = ± 6 [152] -0	
SIZE A	CAGE CODE 53919	DRAWN BY DZNN	ITEM NO. PE3W13081LF/HS
		REV A	
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.			