

TNC Male Right Angle to TNC Female Low Loss Cable Using LMR-400-DB Coax with HeatShrink



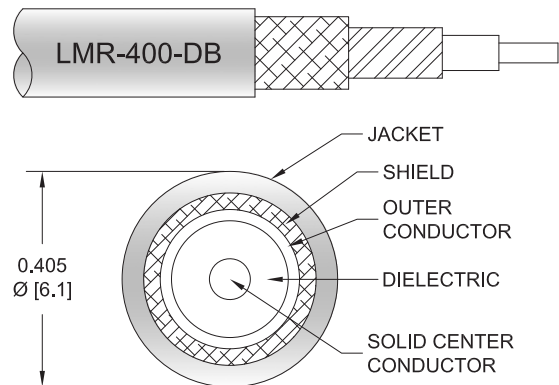
PE3W13683/HS

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: TNC Female
- Cable Type: LMR-400-DB
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W13683/HS TNC male right angle to TNC female cable using LMR-400-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 TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-400-DB coax. The PE3W13683/HS TNC male to TNC female cable assembly operates to 6 GHz. The right angle TNC interface on the LMR-400-DB 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		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W13683/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.093	dB/ft	
			0.07	0.1	0.14	0.23	0.31	dB/m	
PE3W13683/HS-12	12 inch	Insertion Loss (Typ.)	0.42	0.43	0.45	0.47	0.5	dB	0.68
PE3W13683/HS-24	24 inch	Insertion Loss (Typ.)	0.44	0.46	0.49	0.54	0.59	dB	0.751
PE3W13683/HS-36	36 inch	Insertion Loss (Typ.)	0.46	0.49	0.53	0.61	0.68	dB	0.821
PE3W13683/HS-48	48 inch	Insertion Loss (Typ.)	0.48	0.52	0.57	0.68	0.78	dB	0.891
PE3W13683/HS-60	60 inch	Insertion Loss (Typ.)	0.5	0.54	0.61	0.74	0.87	dB	0.961

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:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.68 pounds
Additional Weight per Inch:	0.00584 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.61 lbs [276.69 g]

Cable

Cable Type	LMR-400-DB
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
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	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle	TNC Female
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Nickel
Coupling Nut Material and Plating	Brass, Silver	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W13683/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W13683/HS - xx uu

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

Example: PE3W13683/HS-12 = 12 inches long cable
 PE3W13683/HS-100cm = 100 cm long cable

TNC Male Right Angle to TNC Female Low Loss Cable Using LMR-400-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.

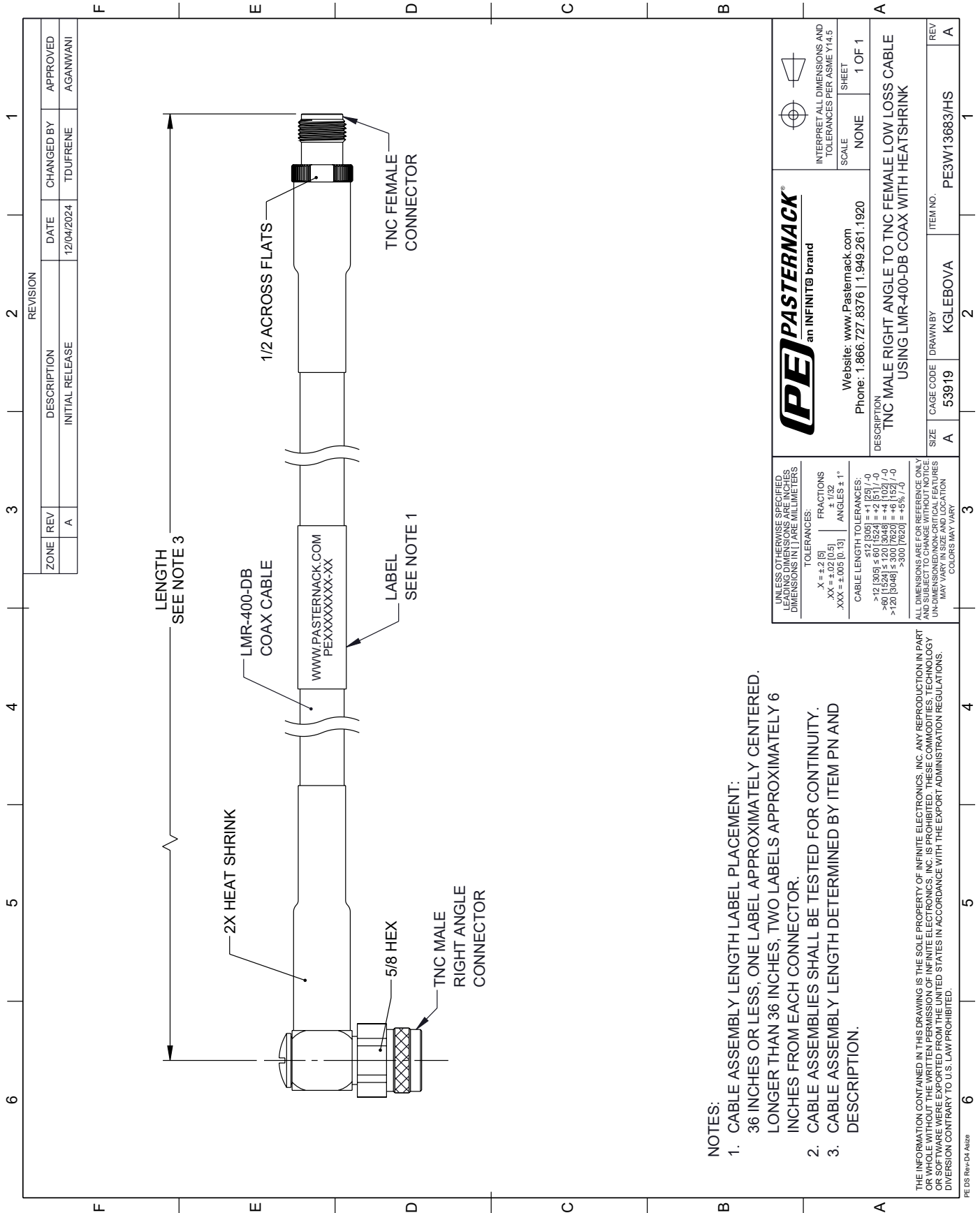
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to TNC Female Low Loss Cable Using LMR-400-DB Coax with HeatShrink PE3W13683/HS](#)

URL: <https://www.pasternack.com/tnc-male-right-angle-to-tnc-female-low-loss-cable-using-lmr-400-db-with-heatshrink-pe3w13683-hs-p.aspx>

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PE3W13683/HS 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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 A1822

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PARENS ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [5] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5] ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 [305] ≤ 60 [1524] = +1 [25] / -0</p> <p>>60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>>120 [3048] ≤ 600 [15240] = +6 [152] / -0</p> <p>>600 [15240] = +5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		<p>PE PASTERNAK an INFINITTE brand</p> <p>Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: TNC MALE RIGHT ANGLE TO TNC FEMALE LOW LOSS CABLE USING LMR-400-DB COAX WITH HEATSHRINK</p>		<p>SIZE: A</p> <p>CAGE CODE: 53919</p> <p>DRAWN BY: KGLEBOVA</p> <p>ITEM NO.: PE3W13683/HS</p>	<p>REV: A</p>	

REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	12/04/2024
		CHANGED BY	AGANWANI
		APPROVED	