



SMA Male to TNC Male Low Loss Cable Using LMR-400 Coax

TECHNICAL DATA SHEET

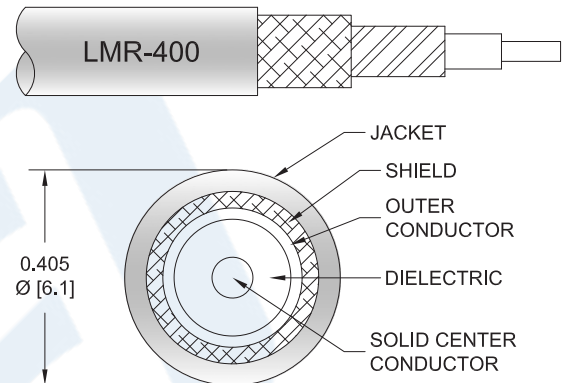
PE3W00902

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W00902 SMA male to TNC male cable using LMR-400 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W00902 SMA male to TNC 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: [SMA Male to TNC Male Low Loss Cable Using LMR-400 Coax PE3W00902](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
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]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ω /1000ft [Ω /Km]
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
PE3W00902	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.03	0.04	0.07	0.11	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3W00902-12	12 inch	Insertion Loss (Typ.)	0.37	0.38	0.4	0.42	0.46	dB	0.228
PE3W00902-24	24 inch	Insertion Loss (Typ.)	0.39	0.41	0.44	0.49	0.57	dB	0.296
PE3W00902-36	36 inch	Insertion Loss (Typ.)	0.41	0.44	0.48	0.56	0.68	dB	0.363
PE3W00902-48	48 inch	Insertion Loss (Typ.)	0.43	0.47	0.52	0.63	0.79	dB	0.43
PE3W00902-60	60 inch	Insertion Loss (Typ.)	0.45	0.49	0.56	0.69	0.89	dB	0.497

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:	0.25 dB
Base Weight:	0.228 pounds
Additional Weight per Inch:	0.00559 pounds

Mechanical Specifications

Cable Assembly

Weight	0.228 lbs [103.42 g]
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Cable

Cable Type	LMR-400
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]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Threaded	TNC Male Threaded
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		50 μinch
Dielectric Type	PTFE	
Body Material and Plating	Brass, Gold	Brass, Tri-Metal
Body Plating Specification		80 μinch
Coupling Nut Material and Plating	Brass, Gold	Brass, Tri-Metal
Coupling Nut Plating Specification		80 μinch
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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PE3W00902

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3W00902 - xx uu

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

Example: PE3W00902-12 = 12 inches long cable
PE3W00902-100cm = 100 cm long cable

SMA Male to TNC Male Low Loss Cable Using LMR-400 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.

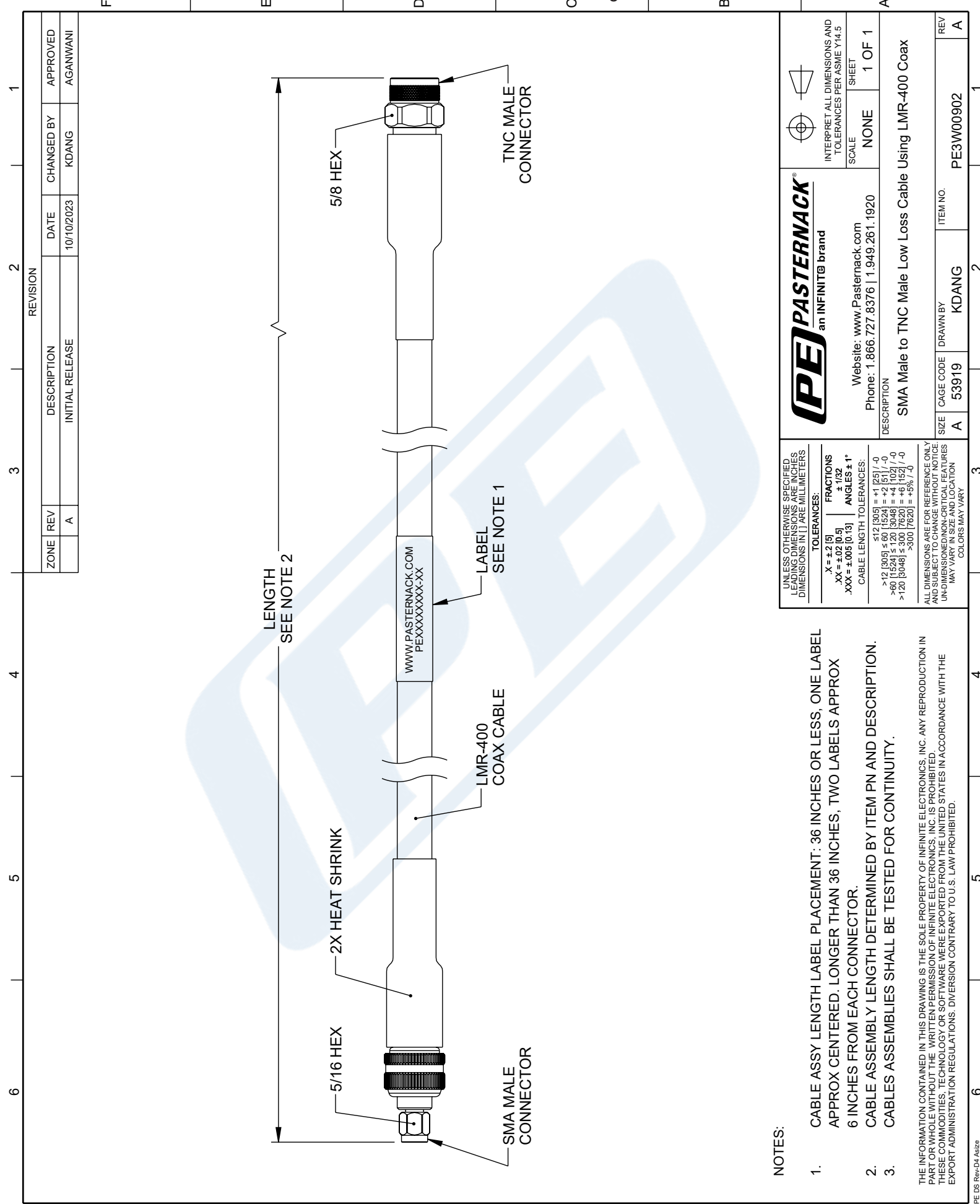
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URL: <https://www.pasternack.com/sma-male-to-tnc-male-low-loss-cable-using-lmr-400-pe3w00902-p.aspx>

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.

PE3W00902 CAD Drawing

SMA Male to TNC Male Low Loss Cable Using LMR-400 Coax



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

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
PE PASTERNAK an INFINIT® brand		SCALE	NONE
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SHEET	1 OF 1
DESCRIPTION SMA Male to TNC Male Low Loss Cable Using LMR-400 Coax			
SIZE	A	CABLE CODE	53919
DRAWN BY	KDANG	ITEM NO.	PE3W00902
REV	A		

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

TOLERANCES:
 .X = ± 2 [5]
 .XX = ± 02 [0.5] ± 1/32
 .XXX = ± .005 [0.13] ± 1/32

ANGLES ± 1°
 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] = ± 8 [93] / -0
 > 300 [7620] = ± 9 [9] / -0

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

NOTES:

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

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