



TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

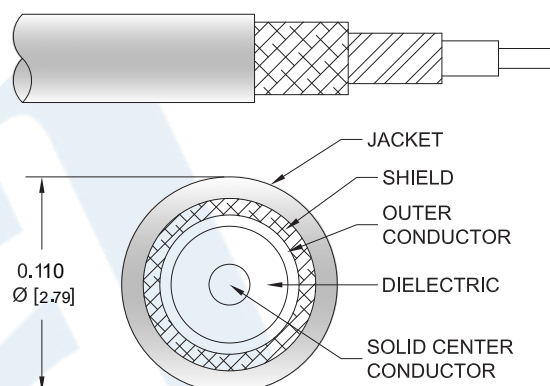
PE3W10237

Configuration

- Connector 1: TNC Male
- Connector 2: SMA Male Right Angle
- Cable Type: LMR-100A

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W10237 TNC male to SMA male right angle cable using LMR-100 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-100A coax. The PE3W10237 TNC male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-100A 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.

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 Right Angle Low Loss Cable Using LMR-100 Coax PE3W10237](#)



TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3W10237

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	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.)	0.115	0.165	0.24	0.398	0.641	dB/ft
	0.38	0.54	0.79	1.31	2.1	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB for the SMA male connector and 0.1XSQRT(FGHz) dB for the TNC male connector.

Mechanical Specifications

Cable Assembly

Weight 0.069 lbs [31.3 g]

Cable

Cable Type LMR-100A
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 Dielectric Type PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PVC, Black
 Jacket Diameter 0.11 in [2.79 mm]

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 Right Angle Low Loss Cable Using LMR-100 Coax PE3W10237](#)



TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3W10237

One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	SMA Male Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	15 µin	50 µin minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin	100 µin minimum
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:

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 Right Angle Low Loss Cable Using LMR-100 Coax PE3W10237](#)



TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3W10237

How to Order

Part Number Configuration:

PE3W10237

- **xx**

uu

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

Example: PE3W10237-12 = 12 inches long cable
PE3W10237-100cm = 100 cm long cable

TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 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.

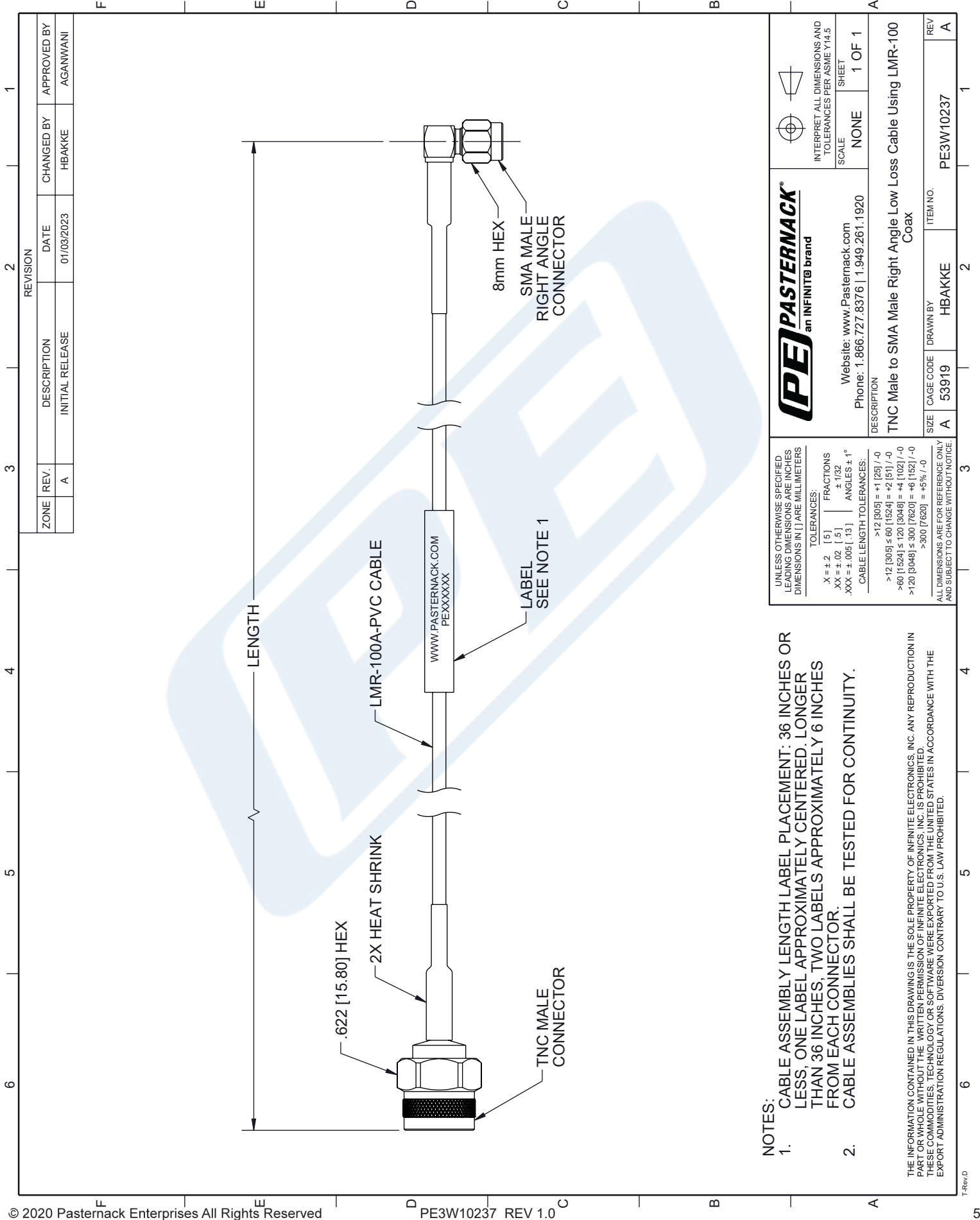
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax PE3W10237](#)

URL: <https://www.pasternack.com/tnc-male-to-sma-male-low-loss-cable-using-lmr-100-pe3w10237-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.

PE3W10237 CAD Drawing

TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax



PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION: TNC Male to SMA Male Right Angle Low Loss Cable Using LMR-100 Coax

SIZE: A	CAGE CODE: 53919	DRAWN BY: HBAKKE	ITEM NO.: PE3W10237	REV: A
---------	------------------	------------------	---------------------	--------