

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



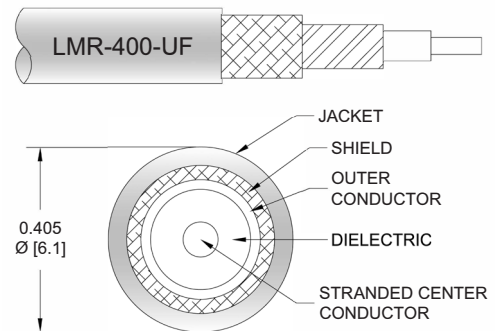
PE3W12438

Configuration

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

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12438 SMA male to TNC female cable using LMR-400-UF 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 female gender configuration with 50 ohm flexible LMR-400-UF coax. The PE3W12438 SMA male to TNC female cable assembly operates to 6 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.

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		1.07 [3.51]		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	250	500	1000	2500	6000	MHz	
PE3W12438	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.035	0.05	0.081	0.112	dB/ft	
			0.08	0.12	0.17	0.27	0.37	dB/m	
PE3W12438-12	12 inch	Insertion Loss (Typ.)	0.33	0.34	0.35	0.39	0.42	dB	0.657
PE3W12438-24	24 inch	Insertion Loss (Typ.)	0.35	0.37	0.4	0.47	0.53	dB	0.744
PE3W12438-36	36 inch	Insertion Loss (Typ.)	0.37	0.41	0.45	0.55	0.64	dB	0.831
PE3W12438-60	48 inch	Insertion Loss (Typ.)	0.42	0.48	0.55	0.71	0.86	dB	1.005
PE3W12438-300	60 inch	Insertion Loss (Typ.)	0.88	1.18	1.55	2.33	3.1	dB	2.745

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:	0.2 dB
Base Weight:	0.657 pounds
Additional Weight per Inch:	0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.657 lbs [298.01 g]

Cable

Cable Type	LMR-400-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
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	TPE, 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	0.38 lbs-ft [0.52 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

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

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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PE3W12438

Typical Performance Data

How to Order

Part Number Configuration: **PE3W12438** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: PE3W12438-12 = 12 inches long cable
PE3W12438-100cm = 100 cm long cable

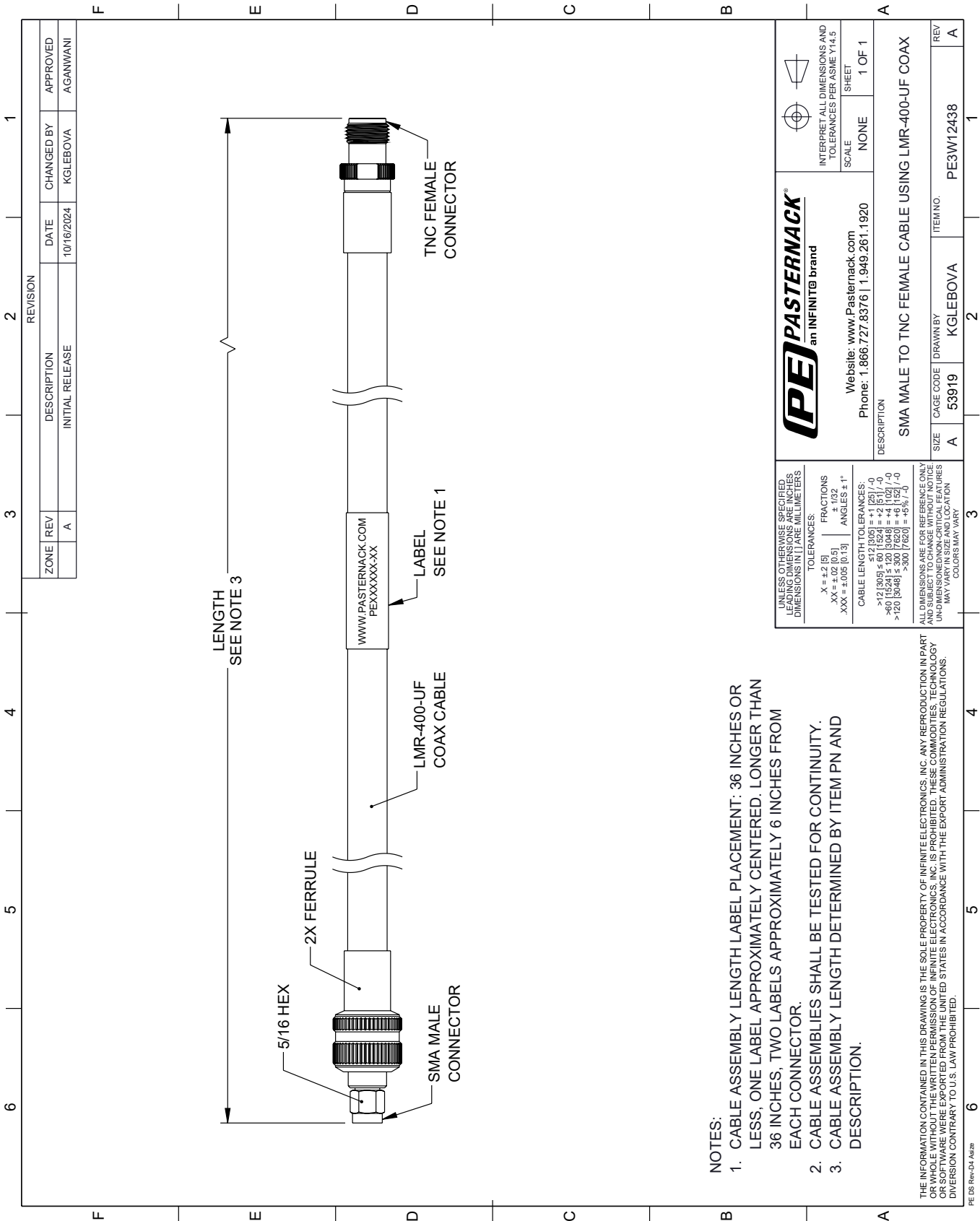
SMA Male to TNC Female Low Loss Cable Using LMR-400-UF Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Female Low Loss Cable Using LMR-400-UF Coax PE3W12438](#)

URL: <https://www.pasternack.com/sma-male-to-tnc-female-low-loss-cable-using-lmr-400-uf-pe3w12438-p.aspx>

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PE3W12438 CAD Drawing
SMA Male to TNC Female Low Loss Cable Using LMR-400-UF Coax



- 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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