



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

TECHNICAL DATA SHEET

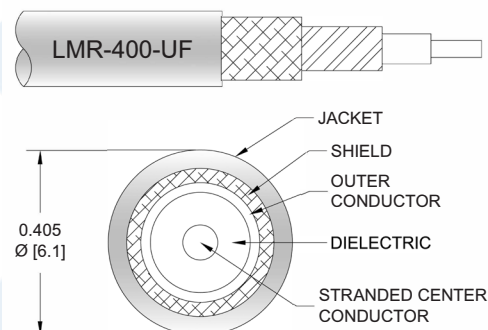
PE3W03478

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- 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 PE3W03478 SMA male to TNC male 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 male gender configuration with 50 ohm flexible LMR-400-UF coax. The PE3W03478 SMA male to TNC male 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.

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-UF Coax PE3W03478](#)



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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]		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	6000	MHz	
PE3W03478	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.03	0.05	0.08	0.13	dB/ft	
			0.08	0.12	0.17	0.27	0.43	dB/m	
PE3W03478-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.25	0.29	0.33	dB	0.224
PE3W03478-36	36 inch	Insertion Loss (Typ.)	0.27	0.31	0.35	0.45	0.59	dB	0.398
PE3W03478-60	60 inch	Insertion Loss (Typ.)	0.32	0.37	0.45	0.61	0.85	dB	0.572
PE3W03478-120	120 inch	Insertion Loss (Typ.)	0.43	0.54	0.69	1.01	1.5	dB	1.007
PE3W03478-300	300 inch	Insertion Loss (Typ.)	0.78	1.05	1.43	2.23	3.45	dB	2.312

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: 0.1 dB
 Base Weight: 0.224 pounds
 Additional Weight per Inch: 0.00725 pounds

Mechanical Specifications

Cable Assembly

Weight 0.224 lbs [101.6 g]

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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]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Threaded	TNC Male Threaded
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Silver
Contact Plating Specification		ASTM-B700
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification		ASTM-B689
Coupling Nut Material and Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Specification		ASTM-B689
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3W03478

- **xx**

uu

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

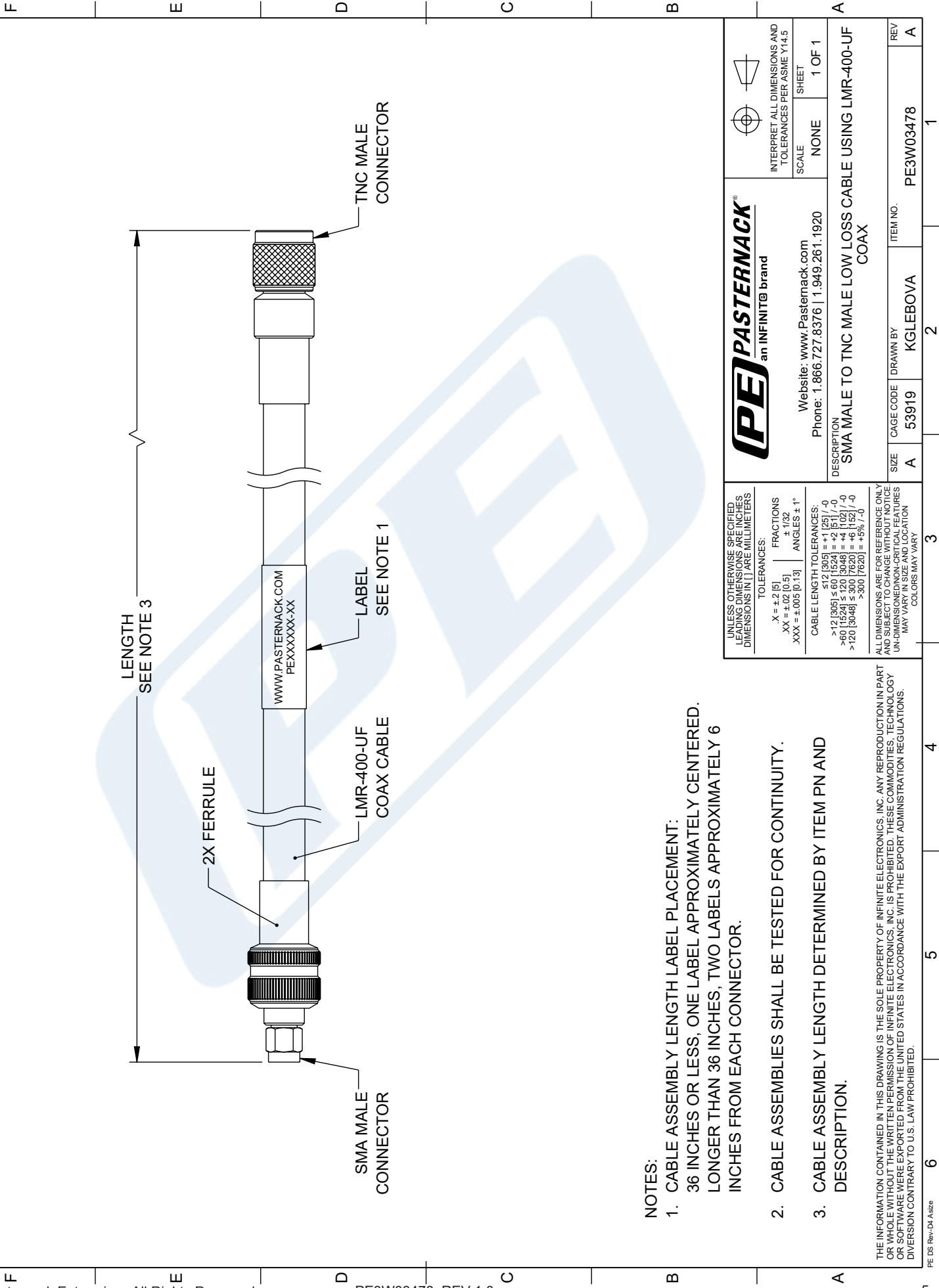
Example: PE3W03478-12 = 12 inches long cable
PE3W03478-100cm = 100 cm long cable

SMA Male to TNC Male 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 Male Low Loss Cable Using LMR-400-UF Coax PE3W03478](#)

URL: <https://www.pasternack.com/sma-male-to-tnc-male-low-loss-cable-using-lmr-400-uf-pe3w03478-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.



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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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

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

TOLERANCES:

X = ±.2 [5]

XX = ±.02 [0.5]

XXX = ±.005 [0.13]

FRACTIONS

± 1/32

ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 517 [1303] = ±.125 [-0

>517 [1303] ≤ 120 [3048] = ±.25 [-0

>60 [1524] ≤ 120 [3048] = ±.102 [-0

>120 [3048] ≤ 300 [7620] = ±.152 [-0

>300 [7620] = ±.5% [-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

DESCRIPTION
SMA MALE TO TNC MALE LOW LOSS CABLE USING LMR-400-UF COAX

SIZE: A
CAGE CODE: 53919
DRAWN BY: KGLEBOVA
ITEM NO.: PE3W03478
REV: A