

SMA Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with HeatShrink, LF Solder



PE3W09433LF/HS

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W09433LF/HS SMA male to TNC male cable using LMR-240-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-240-UF coax. The PE3W09433LF/HS 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W09433LF/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.046	0.066	0.095	0.155	0.212	dB/ft	
			0.16	0.22	0.32	0.51	0.7	dB/m	
PE3W09433LF/HS-12	12 inch	Insertion Loss (Typ.)	0.6	0.62	0.65	0.71	0.77	dB	0.103
PE3W09433LF/HS-24	24 inch	Insertion Loss (Typ.)	0.65	0.69	0.74	0.86	0.98	dB	0.136
PE3W09433LF/HS-36	36 inch	Insertion Loss (Typ.)	0.69	0.75	0.84	1.02	1.19	dB	0.168
PE3W09433LF/HS-60	60 inch	Insertion Loss (Typ.)	0.78	0.88	1.03	1.33	1.61	dB	0.232
PE3W09433LF/HS-300	300 inch	Insertion Loss (Typ.)	1.7	2.2	2.93	4.43	5.85	dB	0.872

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:	0.25 dB
Loss due to Connector 2:	0.3 dB
Base Weight:	0.103 pounds
Additional Weight per Inch:	0.00267 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.071 lbs [32.21 g]

Cable

Cable Type	LMR-240-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	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	50 μinch
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Brass, Tri-Metal	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 μinch
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80 μinch
Hex Size	5/16 Inch	
Torque		8 in-lbs 0.9 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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PE3W09433LF/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W09433LF/HS - xx uu



Example: PE3W09433LF/HS-12 = 12 inches long cable
PE3W09433LF/HS-100cm = 100 cm long cable

SMA Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with HeatShrink, LF Solder 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.

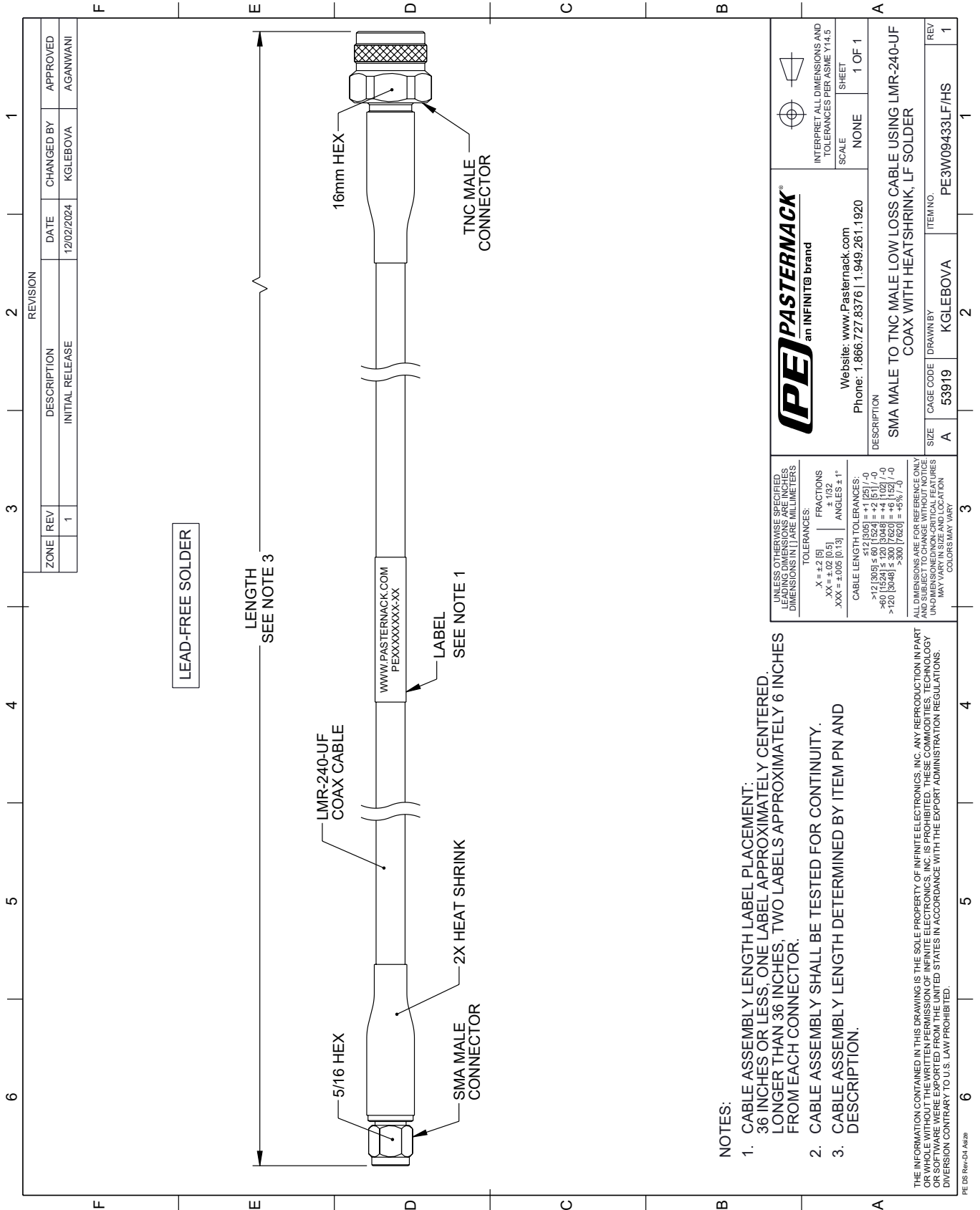
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with HeatShrink, LF Solder PE3W09433LF/HS](#)

URL: <https://www.pasternack.com/sma-male-to-tnc-male-low-loss-cable-using-lmr-240-uf-with-heatshrink-lf-solder-pe3w09433lf-hs-p.aspx>

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PE3W09433LF/HS CAD Drawing

SMA Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with HeatShrink, LF Solder



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	1	12/02/2024	KGLEBOVA	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

PE 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
SMA MALE TO TNC MALE LOW LOSS CABLE USING LMR-240-UF COAX WITH HEATSHRINK, LF SOLDER

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KGLEBOVA	PE3W09433LF/HS

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] ≤ 60 [1524] = ±.1 [25]
 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0
 >120 [3048] ≤ 300 [7620] = ±.1 [25] / -0
 >300 [7620] = ±.1 [25] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE NON-CRITICAL FEATURES. COLORS MAY VARY.

NOTES:

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

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