

SMA Male to N Male Low Loss Cable Using LMR-400-UF Coax with Times Microwave Components



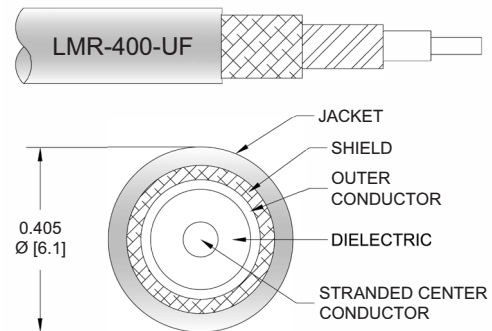
PE3C2551

Configuration

- Connector 1: SMA Male
- Connector 2: N 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 PE3C2551 SMA male to type N 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 type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. The PE3C2551 SMA male to type N 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		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]
Operating Voltage (AC)			335	Vrms

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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	
PE3C2551	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	
PE3C2551-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.25	0.29	0.32	dB	0.239
PE3C2551-24	24 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.37	0.43	dB	0.326
PE3C2551-36	36 inch	Insertion Loss (Typ.)	0.27	0.31	0.35	0.45	0.54	dB	0.413
PE3C2551-60	60 inch	Insertion Loss (Typ.)	0.32	0.38	0.45	0.61	0.76	dB	0.587
PE3C2551-300	300 inch	Insertion Loss (Typ.)	0.78	1.08	1.45	2.23	3	dB	2.327

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:	0.239 pounds
Additional Weight per Inch:	0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.239 lbs [108.41 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	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50µ" Minimum	50 µ in. minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		150 µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		150 µ in. minimum
Hex Size		13/16 inch
Torque	7 in-lbs 0.79 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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PE3C2551

Typical Performance Data

How to Order

Part Number Configuration:

PE3C2551

- xx

uu

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

Length
Base Number

Example: PE3C2551-12 = 12 inches long cable
PE3C2551-100cm = 100 cm long cable

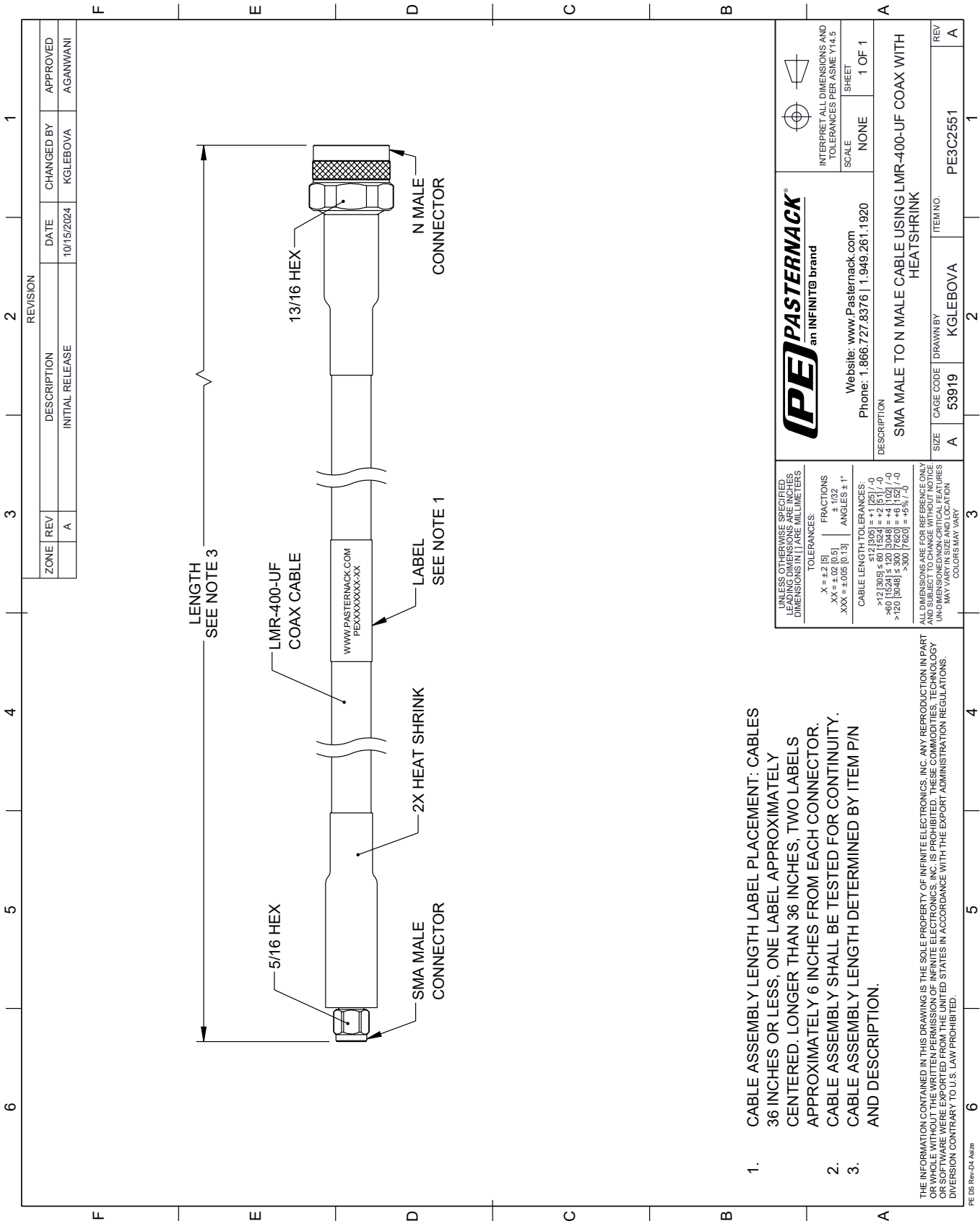
SMA Male to N Male Low Loss Cable Using LMR-400-UF Coax with Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 N Male Low Loss Cable Using LMR-400-UF Coax with Times Microwave Components PE3C2551](https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-400-uf-pe3c2551-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-400-uf-pe3c2551-p.aspx>

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PE3C2551 CAD Drawing
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- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 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 P/N AND DESCRIPTION.
- 2.
- 3.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, TRAILING DIMENSIONS ARE IN MILLIMETERS		PE PASTERNAK an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.Pasternack.com		SCALE: NONE	
X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		SHEET 1 OF 1	
.XX = ±.02 [0.5]		DESCRIPTION		SMA MALE TO N MALE CABLE USING LMR-400-UF COAX WITH HEATSHRINK	
.XXX = ±.005 [0.13]		CABLE LENGTH TOLERANCES:		SIZE A	
ANGLES ± 1°		>12 [305] ≤ 60 [1524] = ±1 [25] / -0		CAGE CODE 53919	
		>60 [1524] ≤ 120 [3048] = ±4 [102] / -0		DRAWN BY KGLEBOVA	
		>120 [3048] ≤ 300 [7620] = ±5% / -0		ITEM NO. PE3C2551	
		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCALL-OUTED FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		REV A	