



SMA Male to BNC Female Low Loss Cable Using LMR-100 Coax

TECHNICAL DATA SHEET

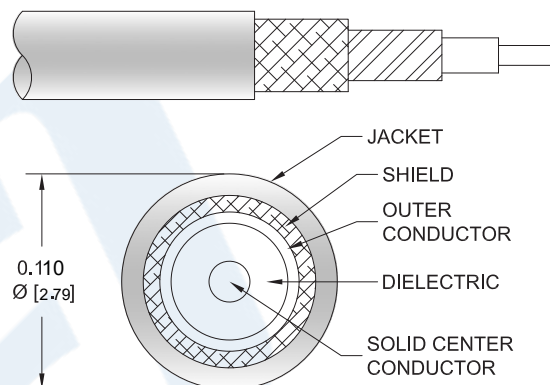
PE3W04401

Configuration

- Connector 1: SMA Male
- Connector 2: BNC Female
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W04401 SMA male to BNC female 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 SMA to BNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W04401 SMA male to BNC female cable assembly operates to 1 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 BNC Female Low Loss Cable Using LMR-100 Coax PE3W04401](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	50	100	250	500	1000	MHz	
PE3W04401	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.12	0.17	0.24	dB/ft	
			0.13	0.21	0.38	0.55	0.79	dB/m	
PE3W04401-24	24 inch	Insertion Loss (Typ.)	0.28	0.33	0.43	0.53	0.68	dB	0.05
PE3W04401-36	36 inch	Insertion Loss (Typ.)	0.32	0.4	0.55	0.7	0.92	dB	0.059
PE3W04401-48	48 inch	Insertion Loss (Typ.)	0.36	0.46	0.66	0.86	1.16	dB	0.068
PE3W04401-100CM	100 cm	Insertion Loss (Typ.)	0.33	0.41	0.58	0.75	0.99	dB	0.062
PE3W04401-200CM	200 cm	Insertion Loss (Typ.)	0.46	0.62	0.96	1.29	1.78	dB	0.092

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:	0.041 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight	0.041 lbs [18.6 g]
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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]
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	SMA Male Threaded	BNC Female Bayonet
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	200 µin minimum	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W04401

- **xx**

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

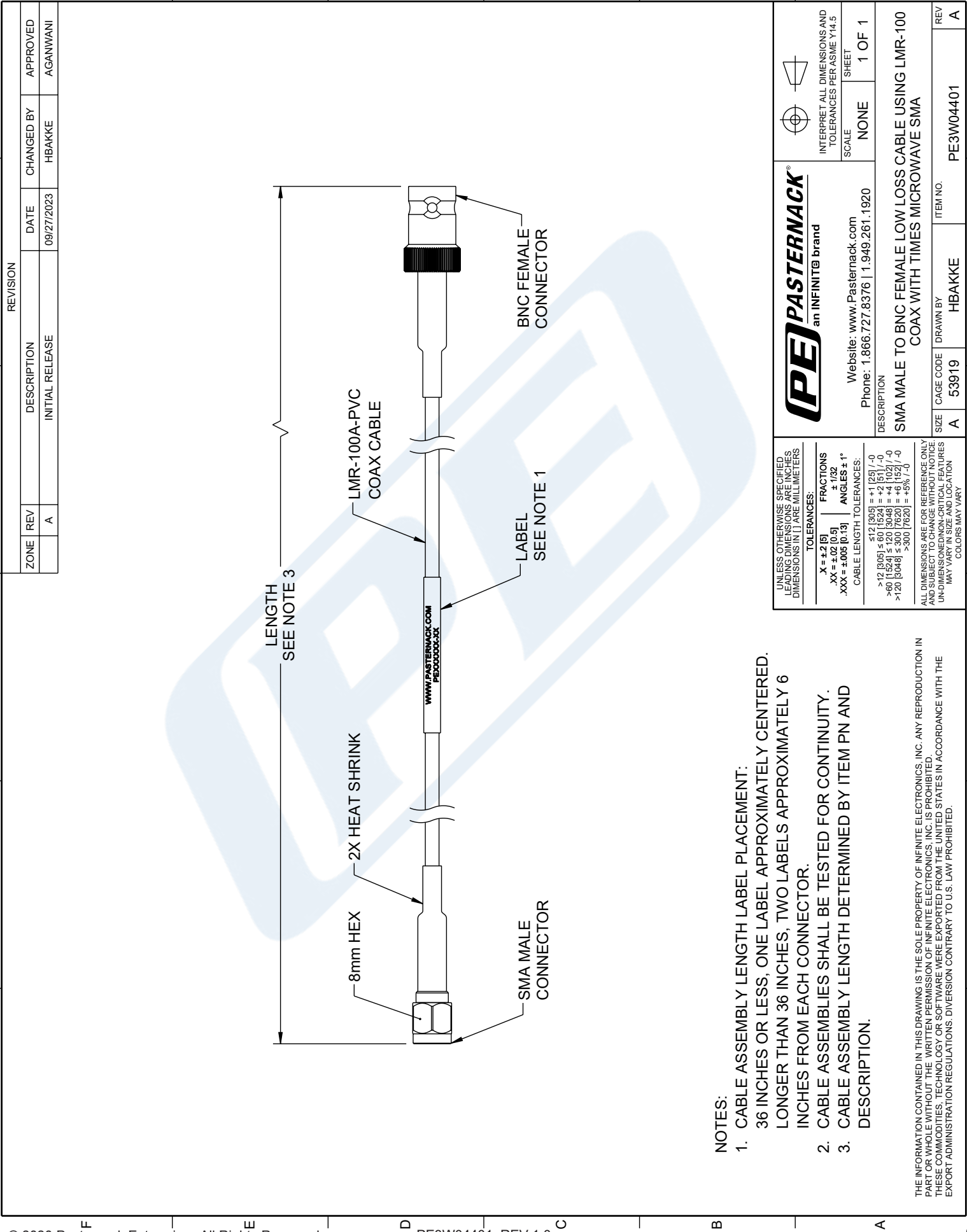
Example: PE3W04401-12 = 12 inches long cable
PE3W04401-100cm = 100 cm long cable

SMA Male to BNC Female 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: [SMA Male to BNC Female Low Loss Cable Using LMR-100 Coax PE3W04401](#)

URL: <https://www.pasternack.com/sma-male-to-bnc-female-low-loss-cable-using-lmr-100-pe3w04401-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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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES, TRAILING DIMENSIONS IN [] ARE MILLIMETERS		PE PASTERNACK an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE: NONE	
.X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°		SHEET 1 OF 1	
CABLE LENGTH TOLERANCES:		DESCRIPTION SMA MALE TO BNC FEMALE LOW LOSS CABLE USING LMR-100 COAX WITH TIMES MICROWAVE SMA		REV A	
<12 [305] = ±.1 [25] / -0 >12 [305] ≤ 60 [1524] = ±.2 [51] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0 >300 [7620] = ±.5% / -0		ITEM NO. PE3W04401		DRAWN BY HBAKKE	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. ALL DIMENSIONS ARE TO UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES, TRAILING DIMENSIONS IN [] ARE MILLIMETERS. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		CAGE CODE A 53919		DATE 09/27/2023	
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