

## SMA Male to BNC Male Low Loss Cable Using LMR-100A-UF Coax

### PE3W16757



#### Configuration

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

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- TPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W16757 SMA male to BNC male cable using LMR-100A-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 BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3W16757 SMA male to BNC male cable assembly operates to 3 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		3	GHz
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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W16757	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.158	0.165	0.24	0.432	dB/ft	
			0.23	0.52	0.55	0.79	1.42	dB/m	
PE3W16757-24	24 In	Insertion Loss (Typ.)	0.34	0.52	0.53	0.68	1.07	dB	0.056
PE3W16757-36	36 In	Insertion Loss (Typ.)	0.41	0.68	0.7	0.92	1.5	dB	0.064
PE3W16757-48	48 In	Insertion Loss (Typ.)	0.48	0.84	0.86	1.16	1.93	dB	0.072
PE3W16757-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.72	0.75	0.99	1.62	dB	0.066
PE3W16757-200CM	200 CM	Insertion Loss (Typ.)	0.66	1.24	1.29	1.78	3.04	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:	0.047 pounds
Additional Weight per Inch:	0.00067 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.047 lbs [21.32 g]

##### Cable

Cable Type	LMR-100A-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	TPE, 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]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	BNC Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
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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### PE3W16757

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3W16757 - xx uu**

PE3W16757: Base Number  
 - xx: Length  
 uu: Unit of Measure:  
 cm = Centimeters  
 <blank> = Inches

Example: PE3W16757-12 = 12 inches long cable  
 PE3W16757-100cm = 100 cm long cable

SMA Male to BNC Male Low Loss Cable Using LMR-100A-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.

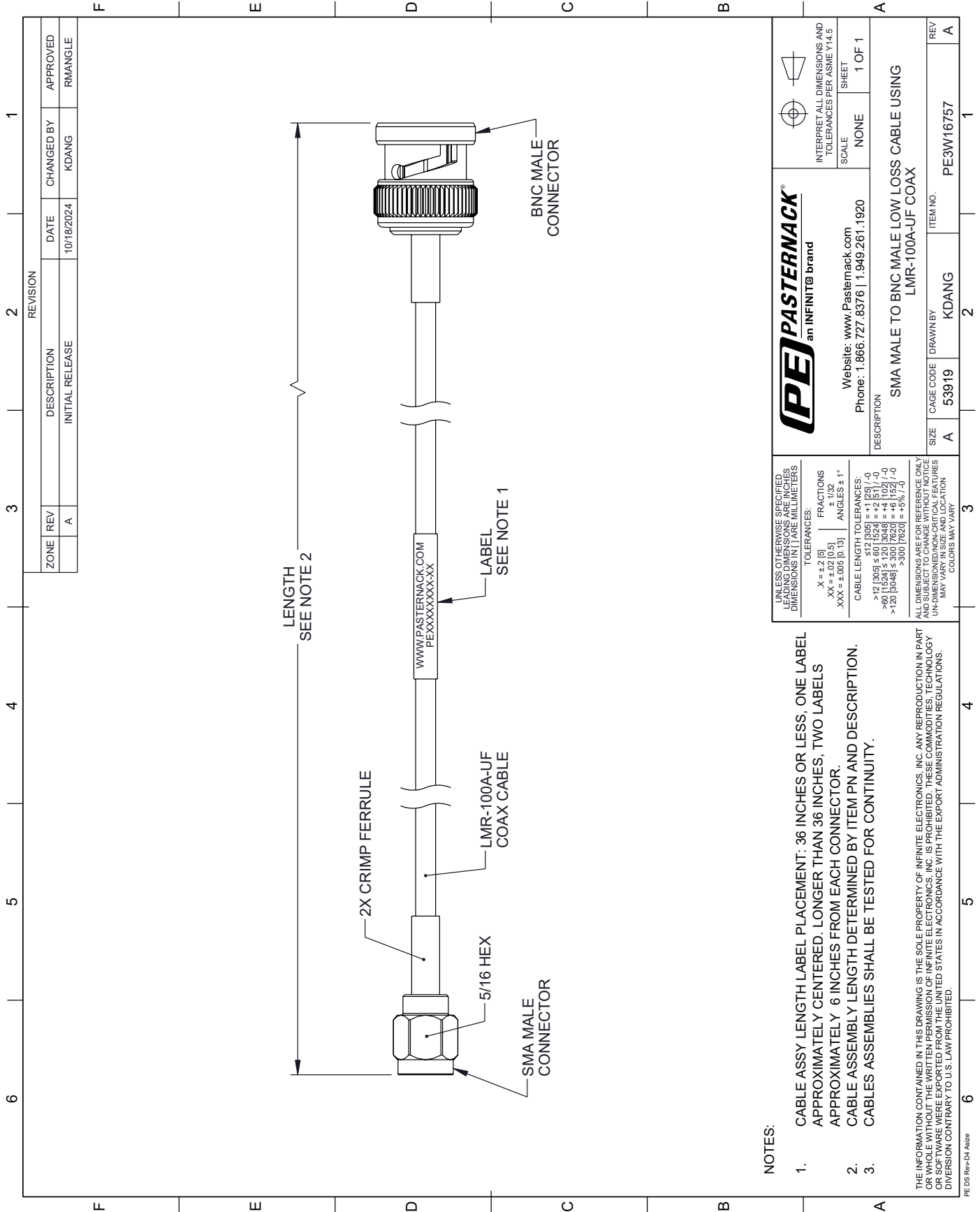
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to BNC Male Low Loss Cable Using LMR-100A-UF Coax PE3W16757](#)

URL: <https://www.pasternack.com/sma-male-to-bnc-male-low-loss-cable-using-lmr-100a-uf-pe3w16757-p.aspx>

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# PE3W16757 CAD Drawing

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



**NOTES:**

1. CABLE ASSY 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 ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PARENS ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [5]      FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5]      ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&gt;12 [305] ≤ 60 [1524] = +1 [25] / -0</p> <p>&gt;60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>&gt;120 [3048] ≤ 300 [7620] = +5 [127] / -0</p> <p>&gt;300 [7620] = +5 [127] / -0</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE NONE</p> <p>SHEET 1 OF 1</p>	
<p>PE PASTERNAK® an INFINITO brand</p> <p>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a></p> <p>Phone: 1.866.727.8376   1.949.261.1920</p>		<p>DESCRIPTION</p> <p>SMA MALE TO BNC MALE LOW LOSS CABLE USING LMR-100A-UF COAX</p>	
<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>	<p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY KDANG</p>	<p>ITEM NO. PE3W16757</p>	<p>REV A</p>