

## SMA Male to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink



### PE3C0821/HS

#### Configuration

- Connector 1: SMA Male
- Connector 2: N Male
- 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 PE3C0821/HS SMA male to type N male 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 type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3C0821/HS SMA male to type N male 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.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1	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	
PE3C0821/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.064	0.115	0.165	0.24	dB/ft	
			0.13	0.21	0.38	0.55	0.79	dB/m	
PE3C0821/HS-24	24 In	Insertion Loss (Typ.)	0.28	0.33	0.43	0.53	0.68	dB	0.092
PE3C0821/HS-36	36 In	Insertion Loss (Typ.)	0.32	0.4	0.55	0.7	0.92	dB	0.101
PE3C0821/HS-48	48 In	Insertion Loss (Typ.)	0.36	0.46	0.66	0.86	1.16	dB	0.11
PE3C0821/HS-100CM	100 CM	Insertion Loss (Typ.)	0.33	0.41	0.58	0.75	0.99	dB	0.104
PE3C0821/HS-200CM	200 CM	Insertion Loss (Typ.)	0.46	0.62	0.96	1.29	1.78	dB	0.134

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:	0.083 pounds
Additional Weight per Inch:	0.00075 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.074 lbs [33.57 g]

##### 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]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 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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### PE3C0821/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C0821/HS - xx uu**

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

Length

Base Number

Example: PE3C0821/HS-12 = 12 inches long cable  
PE3C0821/HS-100cm = 100 cm long cable

SMA Male to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink 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.

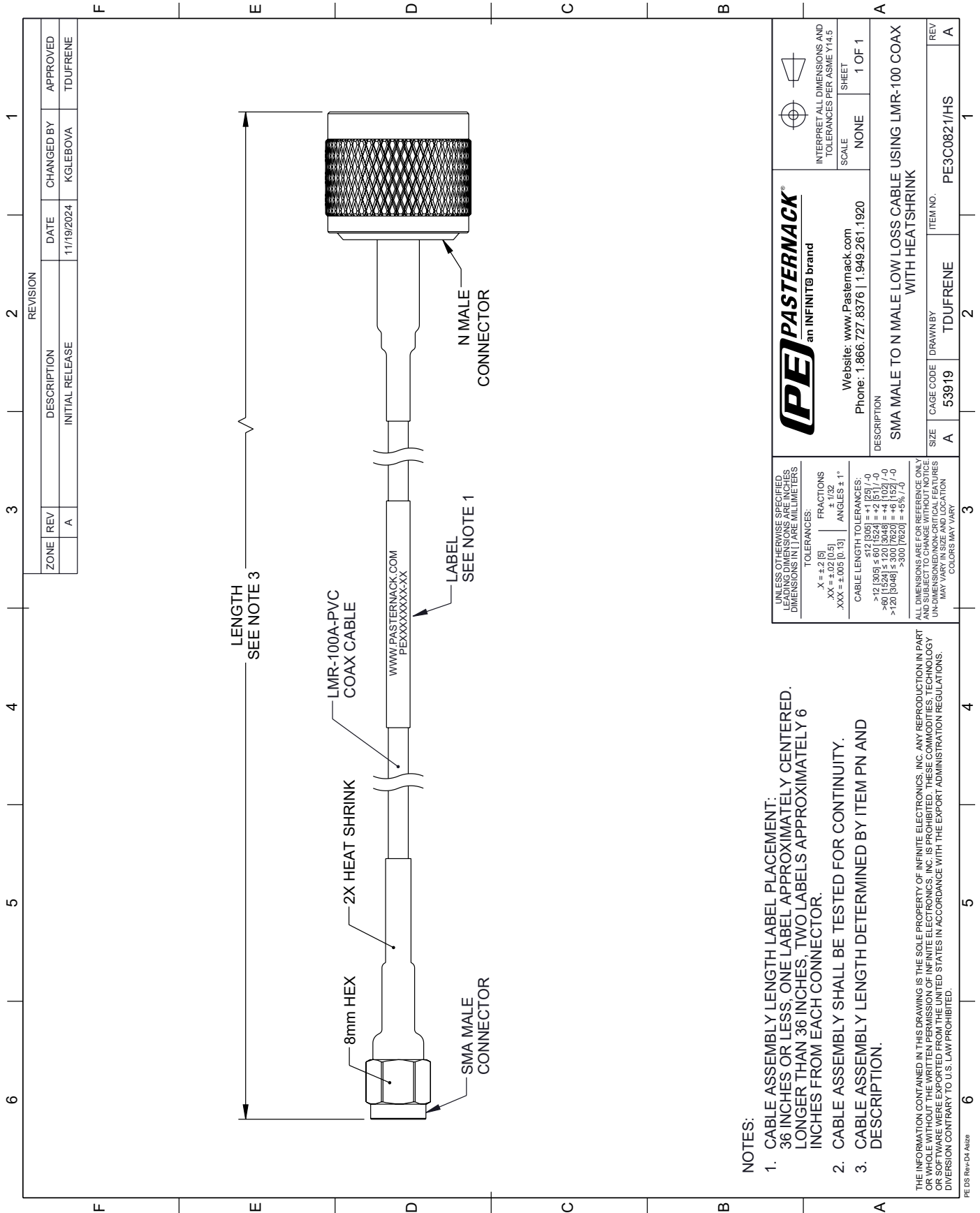
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3C0821/HS](https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3c0821-hs)

URL: <https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3c0821-hs-p.aspx>

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# PE3C0821/HS CAD Drawing

SMA Male to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink



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

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PE DS Rev-04 A182z

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	11/19/2024	KGLEBOVA	TDUFRENE

Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> 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 N MALE LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	TDUFRENE	PE3C0821/HS
REV			A

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN PAREMILLIMETERS

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] / -0  
 >60 [1524] ≤ 120 [3048] = +.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +.5 [12.7] / -0  
 >300 [7620] = +.5 [12.7]

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