

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



PE3C2037/HS

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2037/HS SMA male to SMA 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 SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3C2037/HS SMA male to SMA female 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		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	
PE3C2037/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft	
			0.38	0.55	0.79	1.31	2.11	dB/m	
PE3C2037/HS-24	24 Inch	Insertion Loss (Typ.)	0.58	0.68	0.83	1.15	1.64	dB	0.035
PE3C2037/HS-36	36 Inch	Insertion Loss (Typ.)	0.7	0.85	1.07	1.55	2.28	dB	0.044
PE3C2037/HS-48	48 Inch	Insertion Loss (Typ.)	0.81	1.01	1.31	1.95	2.92	dB	0.053
PE3C2037/HS-100CM	100 CM	Insertion Loss (Typ.)	0.73	0.9	1.14	1.66	2.46	dB	0.047
PE3C2037/HS-200CM	200 CM	Insertion Loss (Typ.)	1.11	1.44	1.93	2.97	4.56	dB	0.076

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:	0.1 dB
Base Weight:	0.026 pounds
Additional Weight per Inch:	0.07833 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.026 lbs [11.79 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	SMA Female
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	15 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	200 µin minimum	

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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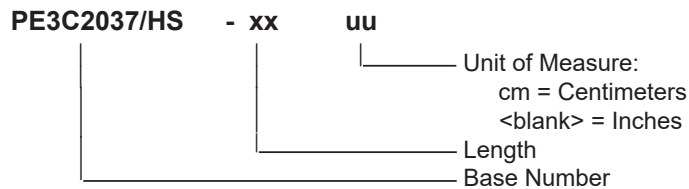


PE3C2037/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C2037/HS-12 = 12 inches long cable
PE3C2037/HS-100cm = 100 cm long cable

SMA Male to SMA Female 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.

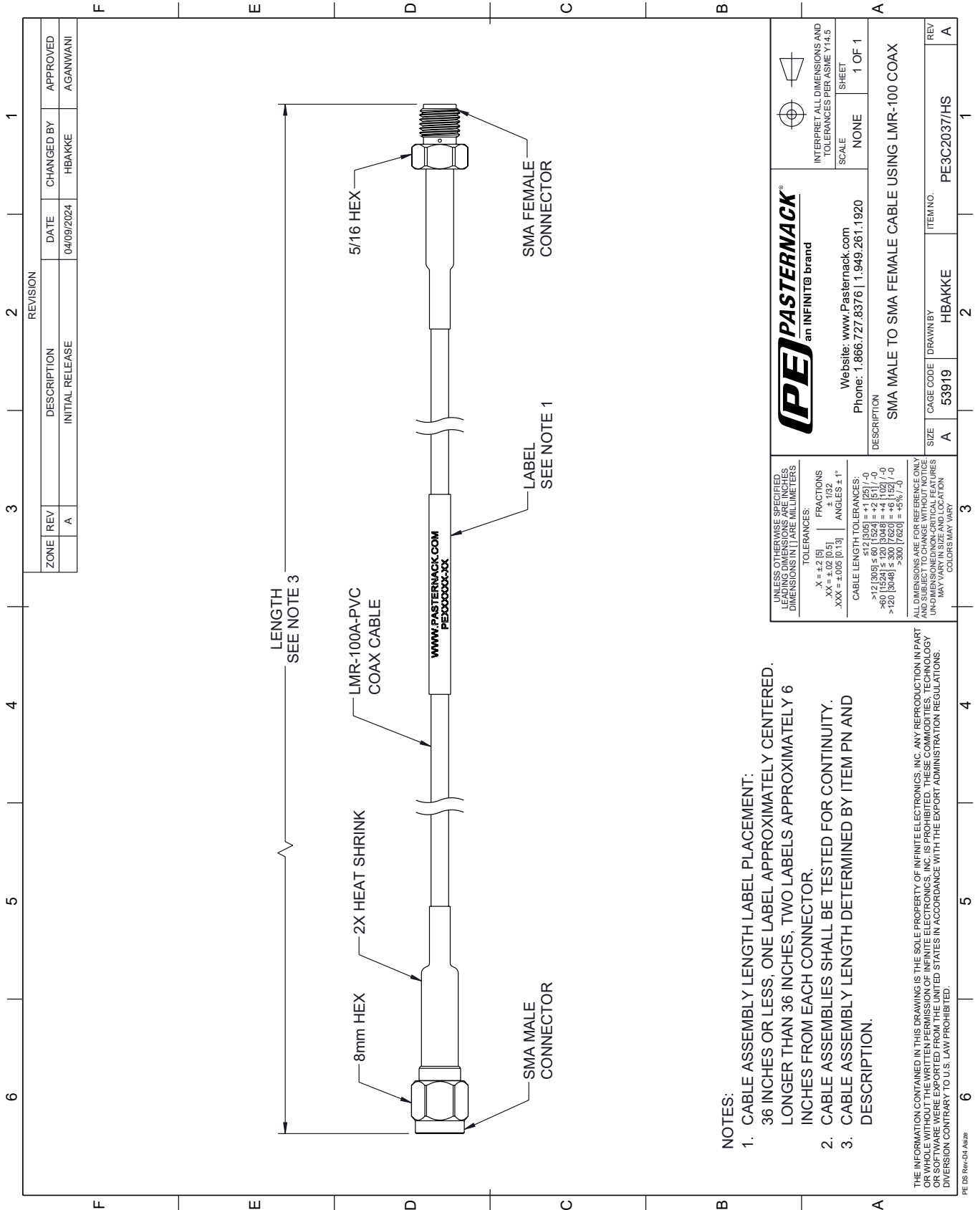
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Low Loss Cable Using LMR-100 Coax with HeatShrink PE3C2037/HS](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-100-with-heatshrink-pe3c2037-hs-p.aspx>

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PE3C2037/HS CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	04/09/2024	HBAKKE	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 SMA FEMALE CABLE USING LMR-100 COAX

SIZE	A	CAGE CODE	53919	DRAWN BY	HBAKKE	ITEM NO.	PE3C2037/HS
REV	A						

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN 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 (2.5) / -0
 >60 (1524) ≤ 120 (3048) = ±.4 (10.2) / -0
 >120 (3048) ≤ 300 (7620) = ±.6 (15.2) / -0
 >300 (7620) = ±.8 (20.3) / -0

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

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PE DS Rev-04 Add2

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