

Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Bulkhead Low Loss Cable Using LMR-100 Coax with HeatShrink



PE3C2563/HS

Configuration

- Connector 1: SMA Plug Reverse Polarity
- Connector 2: SMA Jack Reverse Polarity Bulkhead
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2563/HS reverse polarity SMA plug to reverse polarity SMA jack bulkhead 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 reverse polarity SMA to reverse polarity SMA cable assembly has a plug to jack gender configuration with 50 ohm flexible LMR-100A coax. The PE3C2563/HS reverse polarity SMA plug to reverse polarity SMA jack cable assembly operates to 3 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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	
PE3C2563/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.064	0.115	0.165	0.24	0.432	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3C2563/HS-24	24 In	Insertion Loss (Typ.)	0.33	0.43	0.53	0.68	1.07	dB	0.041
PE3C2563/HS-36	36 In	Insertion Loss (Typ.)	0.4	0.55	0.7	0.92	1.5	dB	0.05
PE3C2563/HS-48	48 In	Insertion Loss (Typ.)	0.46	0.66	0.86	1.16	1.93	dB	0.059
PE3C2563/HS-100CM	100 CM	Insertion Loss (Typ.)	0.41	0.58	0.75	0.99	1.62	dB	0.053
PE3C2563/HS-200CM	200 CM	Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.04	dB	0.083

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:	0.032 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.023 lbs [10.43 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 Plug Reverse Polarity	SMA Jack Reverse Polarity Bulkhead
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Gold	Brass, Gold
Contact Plating Specification	MIL-G-45204	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	QQ-N-290	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	QQ-N-290	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

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

Plotted and Other Data

Notes:

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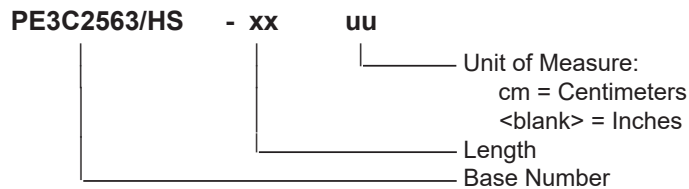


PE3C2563/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C2563/HS-12 = 12 inches long cable
PE3C2563/HS-100cm = 100 cm long cable

Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Bulkhead 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.

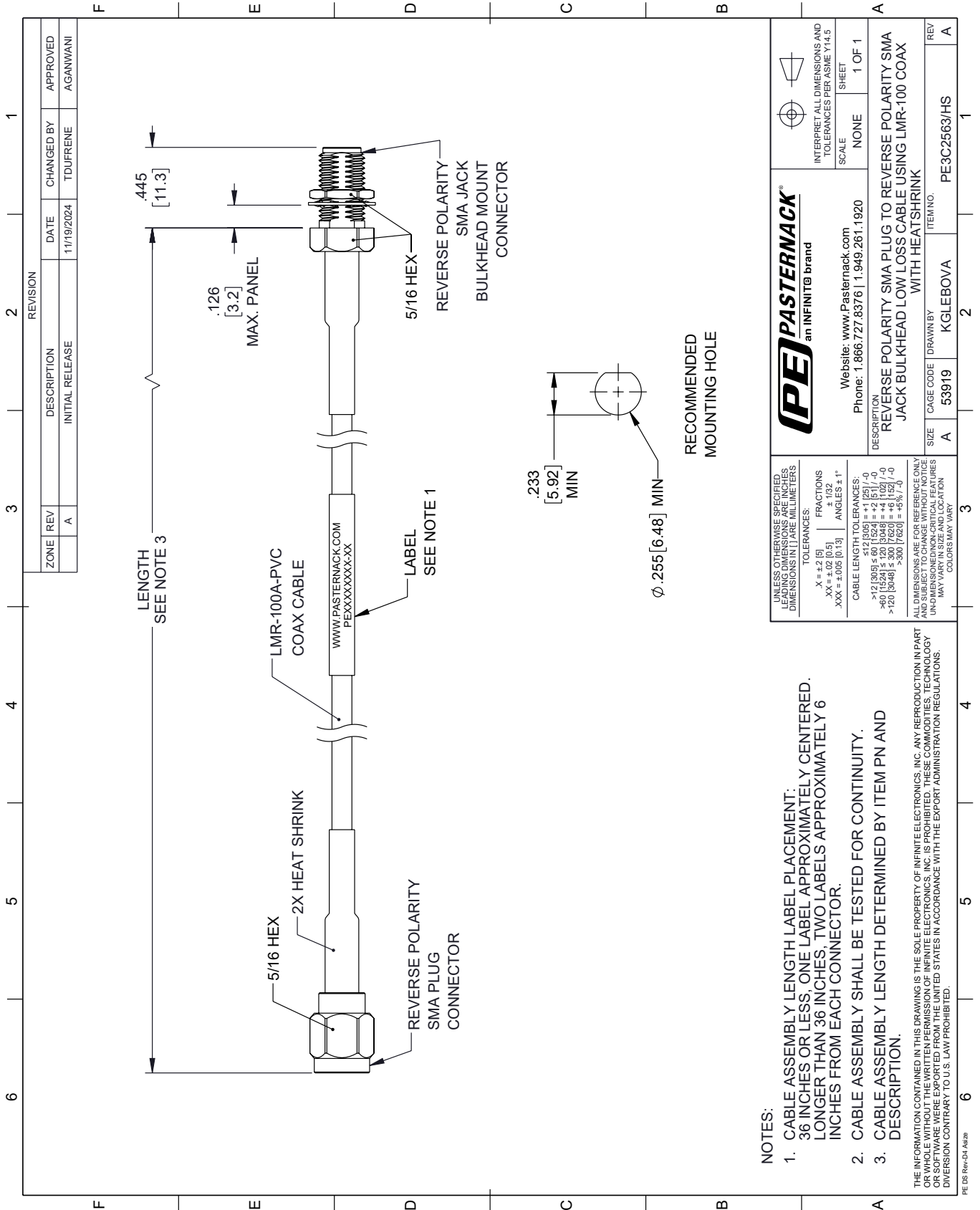
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Plug to Reverse Polarity SMA Jack Bulkhead Low Loss Cable Using LMR-100 Coax with HeatShrink PE3C2563/HS](#)

URL: <https://www.pasternack.com/reverse-polarity-sma-plug-to-reverse-polarity-sma-jack-bulkhead-low-loss-cable-using-lmr-100-with-heatshrink-pe3c2563-hs-p.aspx>

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PE3C2563/HS CAD Drawing

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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 Add2

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE <td>CHANGED BY</td> <td>APPROVED</td>	CHANGED BY	APPROVED
	A	INITIAL RELEASE	11/19/2024	TDURRENE	AGANWANI

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: REVERSE POLARITY SMA PLUG TO REVERSE POLARITY SMA JACK BULKHEAD LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3C2563/HS
REV	DRAWN BY	REV
A	KGLEBOVA	A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE 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 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.