

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



### PE3W03104/HS

#### Configuration

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

#### Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W03104/HS SMA female bulkhead to SMA 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 SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W03104/HS SMA female to SMA male cable assembly operates to 8 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		8	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	
PE3W03104/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.165	0.24	0.352	0.502	0.641	dB/ft	
			0.55	0.79	1.16	1.65	2.11	dB/m	
PE3W03104/HS-24	24 In	Insertion Loss (Typ.)	0.53	0.68	0.91	1.21	1.49	dB	0.041
PE3W03104/HS-36	36 In	Insertion Loss (Typ.)	0.7	0.92	1.26	1.71	2.13	dB	0.05
PE3W03104/HS-48	48 In	Insertion Loss (Typ.)	0.86	1.16	1.61	2.21	2.77	dB	0.059
PE3W03104/HS-100CM	100 CM	Insertion Loss (Typ.)	0.75	0.99	1.36	1.85	2.31	dB	0.053
PE3W03104/HS-200CM	200 CM	Insertion Loss (Typ.)	1.29	1.78	2.51	3.5	4.41	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	0.033 lbs [14.97 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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**PE3W03104/HS**

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating		Brass, Gold
Hex Size		5/16 in
Torque		5 in-lbs 0.57 Nm

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

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

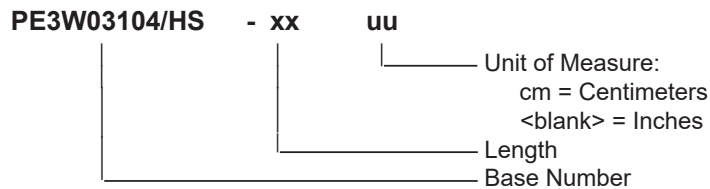


### PE3W03104/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:



Example: PE3W03104/HS-12 = 12 inches long cable  
PE3W03104/HS-100cm = 100 cm long cable

SMA Female Bulkhead to SMA 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.

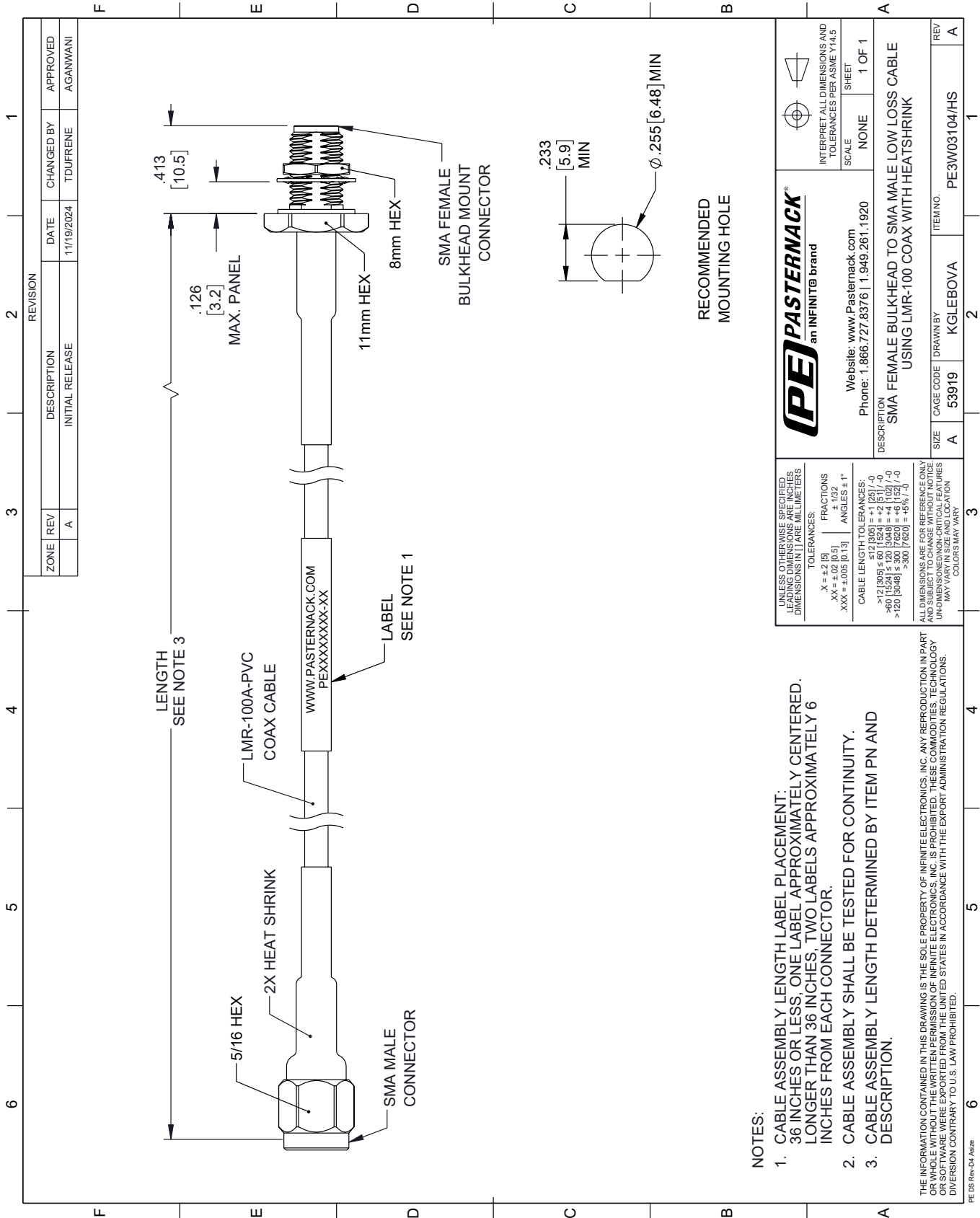
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3W03104/HS](#)

URL: <https://www.pasternack.com/sma-female-bulkhead-to-sma-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3w03104-hs-p.aspx>

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# PE3W03104/HS CAD Drawing

SMA Female Bulkhead to SMA 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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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:

.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
>120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0

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

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
		SCALE	SHEET
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		NONE	1 OF 1
DESCRIPTION SMA FEMALE BULKHEAD TO SMA MALE LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KGLEBOVA	PE3W03104/HS
REV	REV		A