

SMA Female Bulkhead to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax with HeatShrink



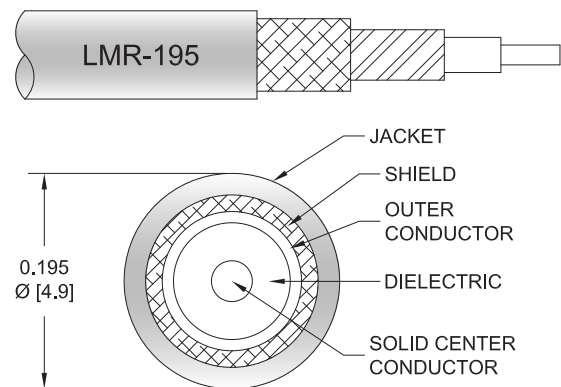
PE3W00446/HS

Configuration

- Connector 1: SMA Female Bulkhead
- Connector 2: SMA Female Bulkhead
- Cable Type: LMR-195
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W00446/HS SMA female bulkhead to SMA female bulkhead cable using LMR-195 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 female gender configuration with 50 ohm flexible LMR-195 coax. The PE3W00446/HS SMA female to SMA female 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		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Operating Voltage (AC)			50	Vrms
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W00446/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.082	0.117	0.169	0.24	0.357	dB/ft	
			0.27	0.39	0.56	0.79	1.18	dB/m	
PE3W00446/HS-12	12 In	Insertion Loss (Typ.)	0.29	0.32	0.37	0.44	0.56	dB	0.048
PE3W00446/HS-24	24 In	Insertion Loss (Typ.)	0.37	0.44	0.54	0.68	0.92	dB	0.071
PE3W00446/HS-36	36 In	Insertion Loss (Typ.)	0.45	0.56	0.71	0.92	1.28	dB	0.093
PE3W00446/HS-48	48 In	Insertion Loss (Typ.)	0.53	0.67	0.88	1.16	1.63	dB	0.115
PE3W00446/HS-60	60 In	Insertion Loss (Typ.)	0.61	0.79	1.05	1.4	1.99	dB	0.137

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:	0.048 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.026 lbs [11.79 g]

Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	SMA Female Bulkhead
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 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

Environmental Specifications

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

Plotted and Other Data

Notes:

SMA Female Bulkhead to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax with HeatShrink



PE3W00446/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W00446/HS - xx uu



Example: PE3W00446/HS-12 = 12 inches long cable
PE3W00446/HS-100cm = 100 cm long cable

SMA Female Bulkhead to SMA Female Bulkhead Low Loss Cable Using LMR-195 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.

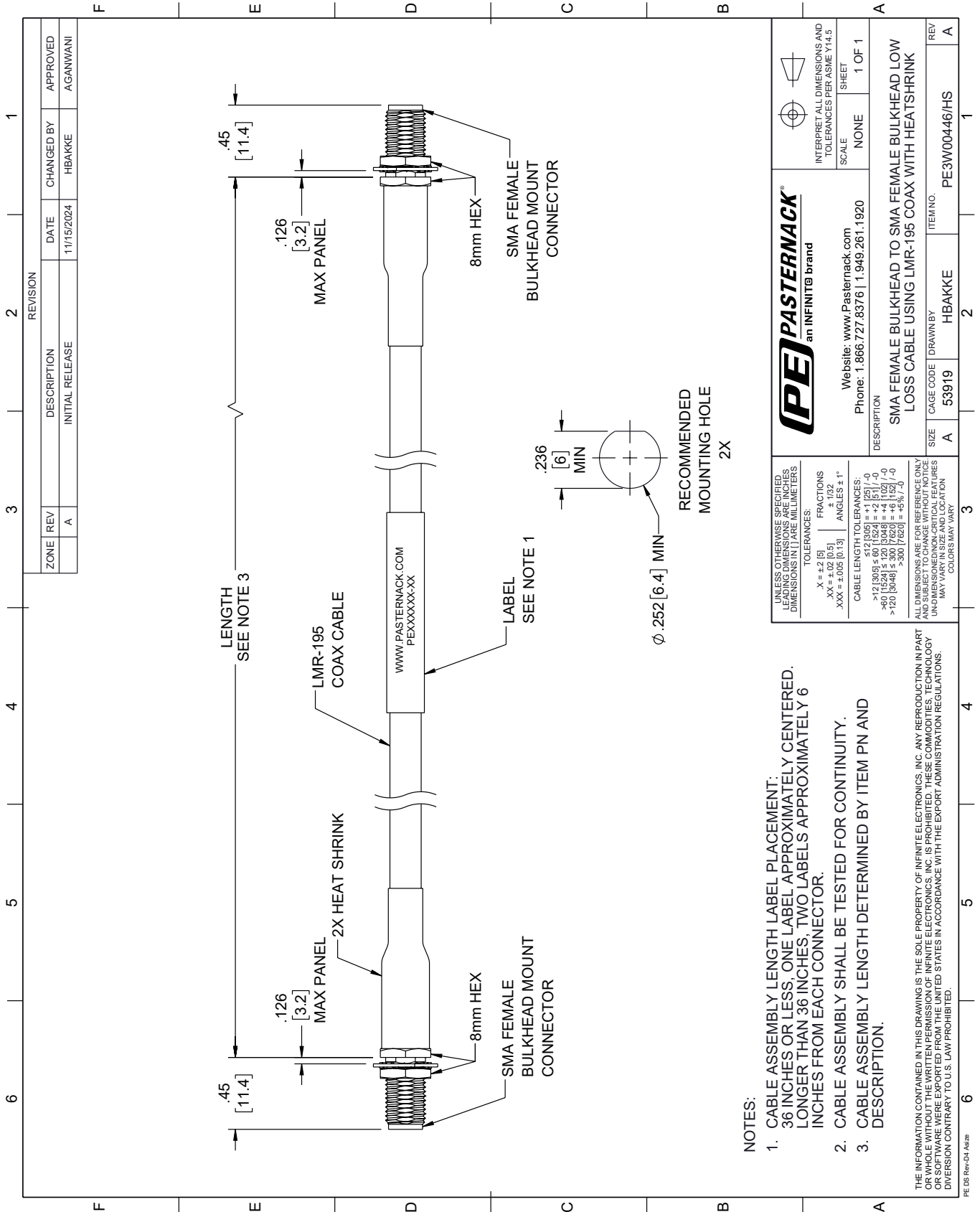
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax with HeatShrink PE3W00446/HS](#)

URL: <https://www.pasternack.com/sma-female-bulkhead-to-sma-female-bulkhead-low-loss-cable-using-lmr-195-with-heatshrink-pe3w00446-hs-p.aspx>

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PE3W00446/HS CAD Drawing

SMA Female Bulkhead to SMA Female Bulkhead Low Loss Cable Using LMR-195 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 [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 UNDIMENSIONED NON-CRITICAL FEATURES. MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
 SHEET: 1 OF 1

DESCRIPTION		REV
SMA FEMALE BULKHEAD TO SMA FEMALE BULKHEAD LOW LOSS CABLE USING LMR-195 COAX WITH HEATSHRINK		A
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3W00446/HS
DRAWN BY		REV
HBAKKE		A