



SMB Plug to SMA Male Low Loss Cable Using LMR-195 Coax with Double HeatShrink

TECHNICAL DATA SHEET

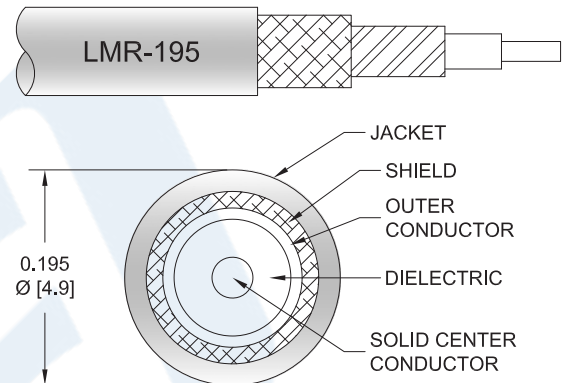
PE3C1609/HS2

Configuration

- Connector 1: SMB Plug
- Connector 2: SMA Male
- Cable Type: LMR-195
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1609/HS2 SMB plug to SMA male 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 SMB to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-195 coax. The PE3C1609/HS2 SMB plug to SMA male cable assembly operates to 4 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Plug to SMA Male Low Loss Cable Using LMR-195 Coax with Double HeatShrink PE3C1609/HS2](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	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]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω /1000ft [Ω /Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3C1609/HS2	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.12	0.24	dB/ft	
			0.12	0.19	0.27	0.39	0.78	dB/m	
PE3C1609/HS2-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.32	0.44	dB	0.053
PE3C1609/HS2-24	24 inch	Insertion Loss (Typ.)	0.27	0.32	0.37	0.44	0.68	dB	0.076
PE3C1609/HS2-36	36 inch	Insertion Loss (Typ.)	0.31	0.38	0.45	0.56	0.92	dB	0.098
PE3C1609/HS2-48	48 inch	Insertion Loss (Typ.)	0.34	0.43	0.53	0.67	1.15	dB	0.12
PE3C1609/HS2-60	60 inch	Insertion Loss (Typ.)	0.38	0.49	0.61	0.79	1.39	dB	0.142

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:	0.053 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight 0.053 lbs [24.04 g]

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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]

Connectors

Description	Connector 1	Connector 2
Type	SMB Plug Push-On	SMA Male Threaded
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 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
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs [0.34 Nm]

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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PE3C1609/HS2

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3C1609/HS2 - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C1609/HS2-12 = 12 inches long cable
PE3C1609/HS2-100cm = 100 cm long cable

SMB Plug to SMA Male Low Loss Cable Using LMR-195 Coax with Double 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.

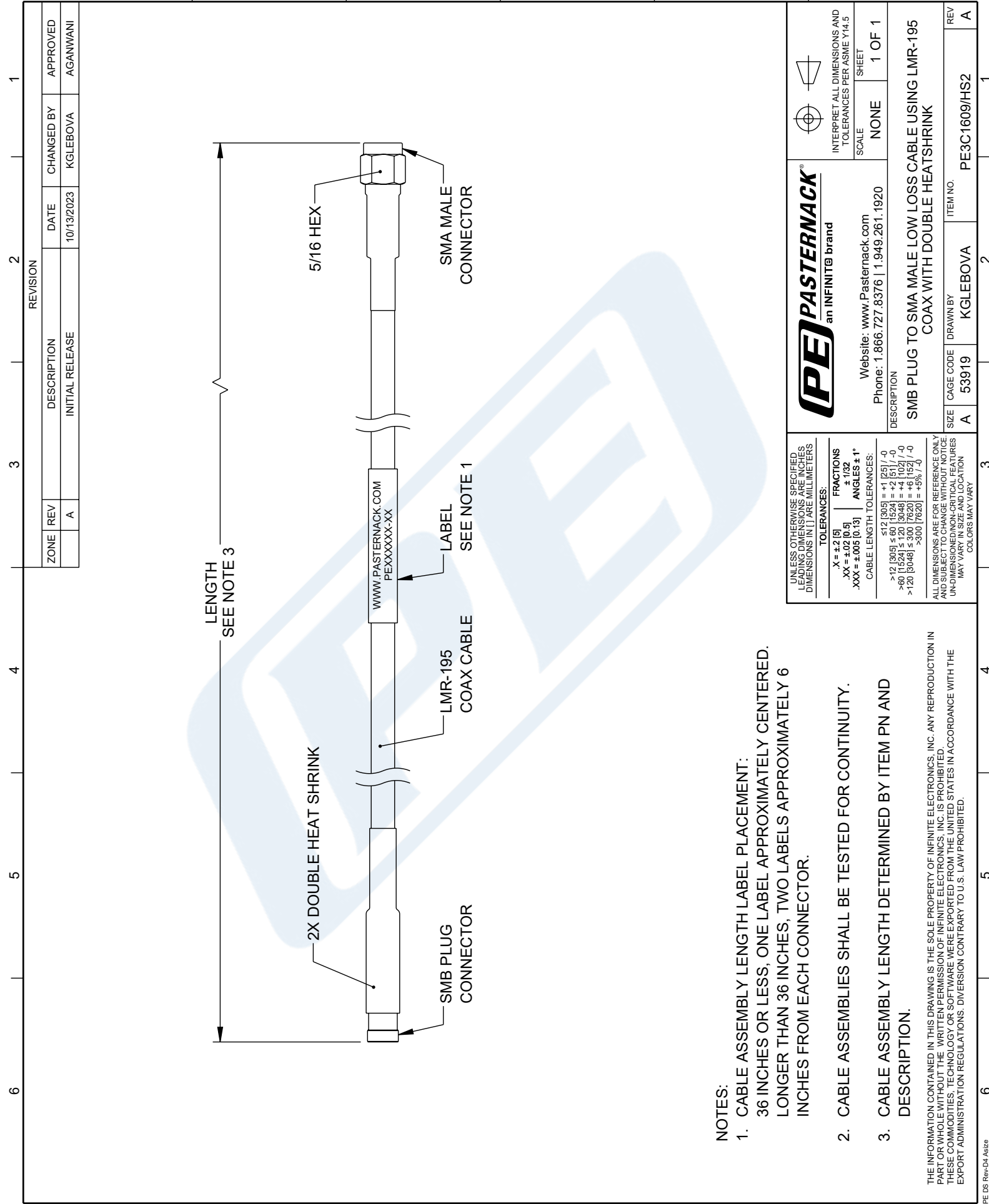
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URL: <https://www.pasternack.com/smb-plug-to-sma-male-low-loss-cable-using-lmr-195-with-double-heatshrink-pe3c1609-hs2-p.aspx>

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PE3C1609/HS2 CAD Drawing

SMB Plug to SMA Male Low Loss Cable Using LMR-195 Coax with Double 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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/13/2023	KGLEBOVA	AGANWANI

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		DESCRIPTION SMB PLUG TO SMA MALE LOW LOSS CABLE USING LMR-195 COAX WITH DOUBLE HEATSHRINK	
SIZE	CABLE CODE	DRAWN BY	ITEM NO.
A	53919	KGLEBOVA	PE3C1609/HS2
REV			A

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]	±.1 [25]
>12 [305] ≤ 60 [1524]	±.2 [51]
>60 [1524] ≤ 120 [3048]	±.4 [102]
>120 [3048]	±.8 [203]

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY