



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

TECHNICAL DATA SHEET

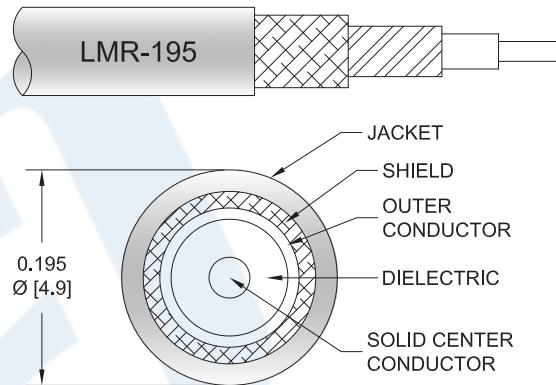
PE3C0168/HS

Configuration

- Connector 1: SMA Female
- Connector 2: SMA Male
- Cable Type: LMR-195
- Coax Cable Group: 3
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0168/HS SMA female 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 SMA to SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-195 coax. The PE3C0168/HS SMA female to SMA male cable assembly operates to 5.8 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: [SMA Female to SMA Male Low Loss Cable Using LMR-195 Coax with HeatShrink PE3C0168/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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]		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	250	500	1000	2500	5800	MHz
PE3C0168/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.08	0.12	0.19	0.3	dB/ft	
			0.19	0.27	0.39	0.63	0.99	dB/m	
PE3C0168/HS-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.046
PE3C0168/HS-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.046
PE3C0168/HS-36	36 inch	Insertion Loss (Typ.)	0.38	0.45	0.55	0.77	1.1	dB	0.069
PE3C0168/HS-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.091
PE3C0168/HS-60	60 inch	Insertion Loss (Typ.)	0.49	0.61	0.78	1.15	1.7	dB	0.113

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: 0.046 pounds

Additional Weight per Inch: 0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight 0.046 lbs [20.87 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	SMA Female Threaded	SMA Male Threaded
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	50 μ in. minimum	50 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in. minimum	100 μ in minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 μ in minimum
Hex Size		5/16 inch
Torque		5 in-lbs [0.57 Nm]

Environmental Specifications
Temperature

Operating Range

-40 to +85 deg C

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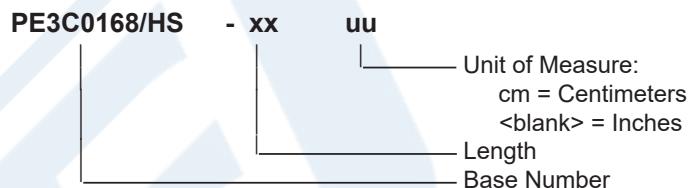
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:



Example: PE3C0168/HS-12 = 12 inches long cable
PE3C0168/HS-100cm = 100 cm long cable

SMA Female to SMA Male 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.

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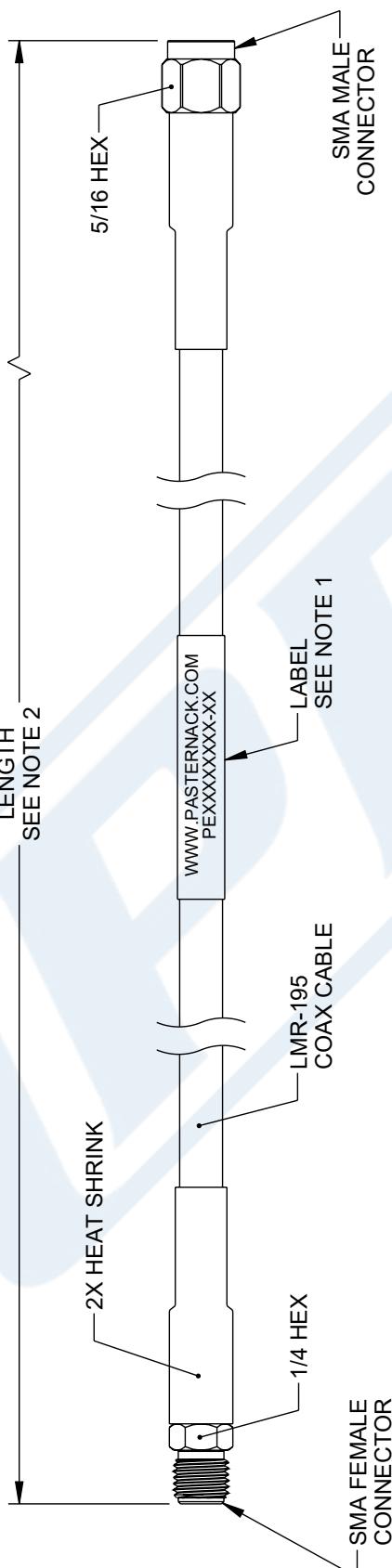
URL: <https://www.pasternack.com/sma-female-to-sma-male-low-loss-cable-using-lmr-195-with-heatshrink-pe3c0168-hs-p.aspx>

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PE3C0168/HS CAD Drawing

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

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ZONE	REV	DESCRIPTION	REVISION	DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE	1	10/2/2023	KDANG	AGANWANI

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NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PASTERNACK® an INFINITE® brand Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 DESCRIPTION SMA Female to SMA Male Low Loss Cable Using LMR-195 Coax with HeatShrink			INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE	SHEET 1 OF 1

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