

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



RF Cable Assemblies Technical Data Sheet

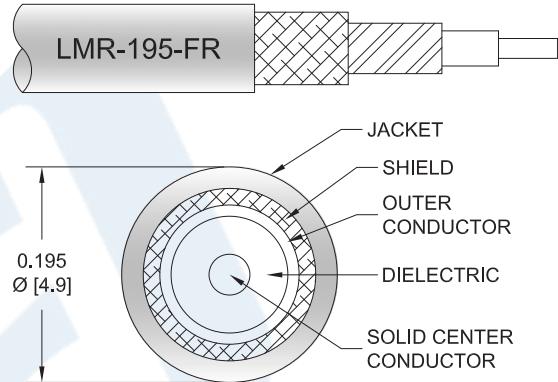
PE3W04116/HS

Configuration

- Connector 1: SMA Female
- Connector 2: SMA Male
- Cable Type: LMR-195-FR

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W04116/HS SMA female to SMA male cable using LMR-195-FR 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-FR coax. The PE3W04116/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: [Fire Rated SMA Female to SMA Male Low Loss Cable Using LMR-195-FR Coax with Heat-Shrink PE3W04116/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		76		%
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

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.057	0.081	0.116	0.19	0.299	dB/ft
	0.19	0.27	0.38	0.62	0.98	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight	0.046 lbs [20.87 g]
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Cable

Cable Type	LMR-195-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	FRPE, Black
Jacket Diameter	0.195 in [4.95 mm]

One Time Minimum Bend Radius	0.5 in [12.7 mm]
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Repeated Minimum Bend Radius
Bending Moment
Flat Plate Crush
Tensile Strength

2 in [50.8 mm]
0.2 lbs-ft [0.27 N-m]
15 lbs/in [0.27 Kg/mm]
40 lbs [18.14 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Male
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		3 in-lbs [0.34 Nm]

Environmental Specifications

Temperature
Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W04116/HS

How to Order

Part Number Configuration:

PE3W04116/HS - xx uu

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

Example: PE3W04116/HS-12 = 12 inches long cable
PE3W04116/HS-100cm = 100 cm long cable

Fire Rated SMA Female to SMA Male Low Loss Cable Using LMR-195-FR 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/fire-rated-sma-female-to-sma-male-low-loss-cable-using-lmr-195-fr-with-heatshrink-pe3w04116-hs-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

