

Fire Rated SSMC Plug to N Female Bulkhead Low Loss Cable Using LMR-100-FR Coax with HeatShrink

PE3W14709/HS

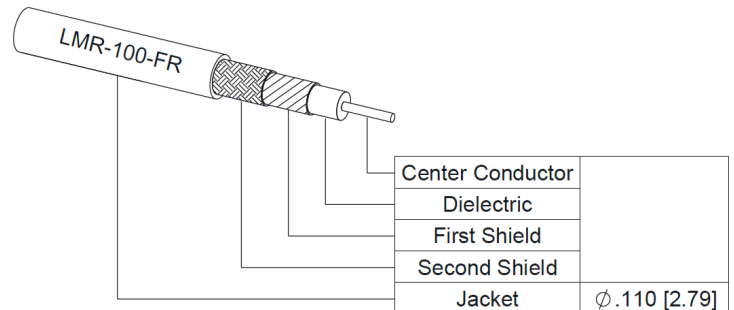


Configuration

- Connector 1: SSMC Plug
- Connector 2: N Female Bulkhead
- Cable Type: LMR-100A-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- FRPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14709/HS SSMC plug to type N female bulkhead cable using LMR-100-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 SSMC to type N cable assembly has a plug to female gender configuration with 50 ohm flexible LMR-100A-FR coax. The PE3W14709/HS SSMC plug to type N female cable assembly operates to 6 GHz. Our RF cable assembly with type N 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		6	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	250	500	1000	2500	6000	MHz	
PE3W14709/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft	
			0.38	0.55	0.79	1.31	2.11	dB/m	
PE3W14709/HS-24	24 In	Insertion Loss (Typ.)	0.43	0.53	0.68	1	1.49	dB	0.105
PE3W14709/HS-36	36 In	Insertion Loss (Typ.)	0.55	0.7	0.92	1.4	2.13	dB	0.114
PE3W14709/HS-48	48 In	Insertion Loss (Typ.)	0.66	0.86	1.16	1.8	2.77	dB	0.123
PE3W14709/HS-100CM	100 CM	Insertion Loss (Typ.)	0.58	0.75	0.99	1.51	2.31	dB	0.117
PE3W14709/HS-200CM	200 CM	Insertion Loss (Typ.)	0.96	1.29	1.78	2.82	4.41	dB	0.147

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:	0.096 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.0863 lbs [39.15 g]

Cable

Cable Type	LMR-100A-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
Jacket Material	FRPE, 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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Connectors

Description	Connector 1	Connector 2
Type	SSMC Plug	N Female Bulkhead
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification		30μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Beryllium Copper, Gold	Brass, Nickel
Body Plating Specification		100μ in minimum
Coupling Nut Material and Plating	Beryllium Copper, Gold	
Hex Size	5/32 inch	
Torque	1 in-lbs 0.11 Nm	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W14709/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W14709/HS

- xx

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W14709/HS-12 = 12 inches long cable
PE3W14709/HS-100cm = 100 cm long cable

Fire Rated SSMC Plug to N Female Bulkhead Low Loss Cable Using LMR-100-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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SSMC Plug to N Female Bulkhead Low Loss Cable Using LMR-100-FR Coax with HeatShrink PE3W14709/HS](#)

URL: <https://www.pasternack.com/fire-rated-ssmc-plug-to-n-female-bulkhead-low-loss-cable-using-lmr-100-fr-with-heatshrink-pe3w14709-hs-p.aspx>

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PE3W14709/HS CAD Drawing

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