

Fire Rated SMA Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195-FR Coax with HeatShrink, LF Solder



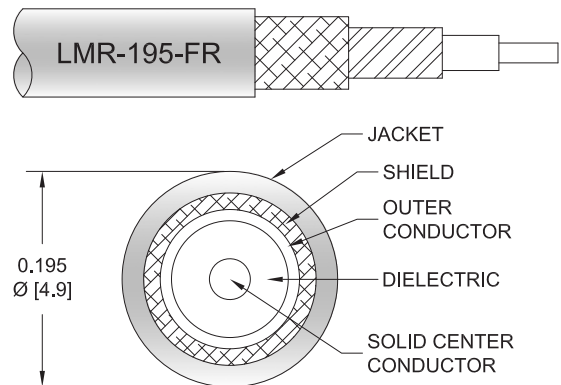
PE3C1709LF/HS

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: TNC Female Bulkhead
- Cable Type: LMR-195-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1709LF/HS SMA male right angle to TNC female bulkhead 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 TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3C1709LF/HS SMA male to TNC female cable assembly operates to 4 GHz. The right angle SMA interface on the LMR-195-FR cable allows for easier connections in tight spaces. Our RF cable assembly with TNC 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		4	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]		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)			500	Vrms
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C1709LF/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.035	0.057	0.082	0.117	0.24	dB/ft	
			0.12	0.19	0.27	0.39	0.79	dB/m	
PE3C1709LF/HS-12	12 In	Insertion Loss (Typ.)	0.34	0.36	0.39	0.42	0.54	dB	0.077
PE3C1709LF/HS-24	24 In	Insertion Loss (Typ.)	0.37	0.42	0.47	0.54	0.78	dB	0.106
PE3C1709LF/HS-36	36 In	Insertion Loss (Typ.)	0.41	0.48	0.55	0.66	1.02	dB	0.134
PE3C1709LF/HS-48	48 In	Insertion Loss (Typ.)	0.44	0.53	0.63	0.77	1.26	dB	0.162
PE3C1709LF/HS-60	60 In	Insertion Loss (Typ.)	0.48	0.59	0.71	0.89	1.5	dB	0.19

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:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.077 pounds
Additional Weight per Inch:	0.00234 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.049 lbs [22.23 g]

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]
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 Male Right Angle	TNC Female Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	30 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

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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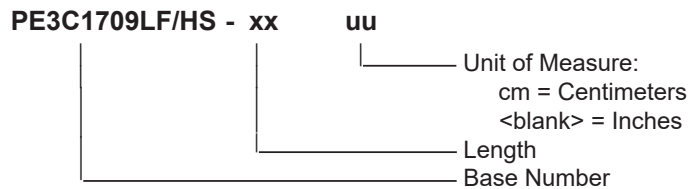


PE3C1709LF/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C1709LF/HS-12 = 12 inches long cable
PE3C1709LF/HS-100cm = 100 cm long cable

Fire Rated SMA Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195-FR Coax with HeatShrink, LF Solder 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.

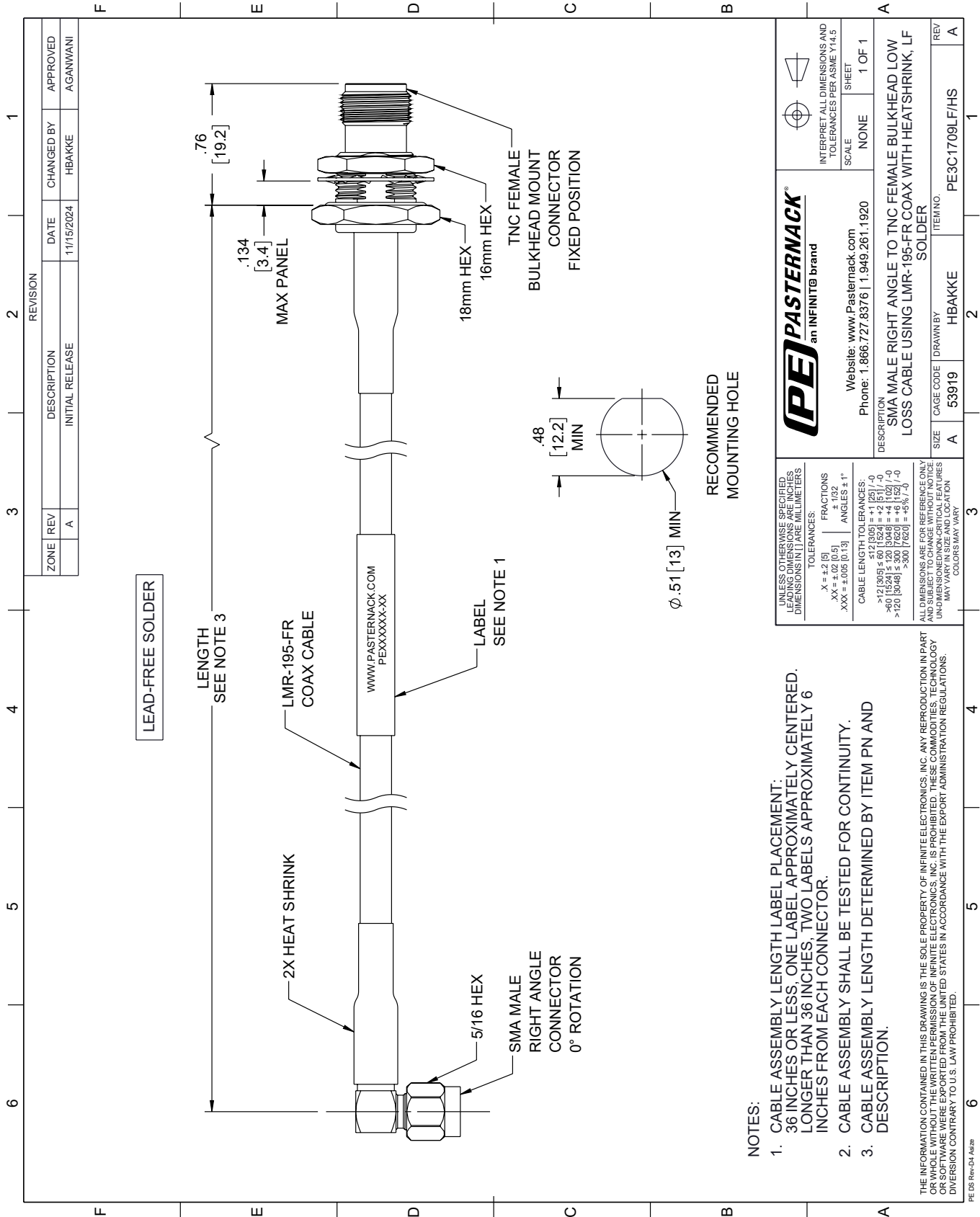
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male Right Angle to TNC Female Bulkhead Low Loss Cable Using LMR-195-FR Coax with HeatShrink, LF Solder PE3C1709LF/HS](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-right-angle-to-tnc-female-bulkhead-low-loss-cable-using-lmr-195-fr-with-heatshrink-lf-solder-pe3c1709lf-hs-p.aspx>

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PE3C1709LF/HS CAD Drawing

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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.

ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. LEADING DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. 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 [15] / -0

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		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.281.1920	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5		SCALE: NONE SHEET: 1 OF 1	
DESCRIPTION: SMA MALE RIGHT ANGLE TO TNC FEMALE BULKHEAD LOW LOSS CABLE USING LMR-195-FR COAX WITH HEATSHRINK, LF SOLDER			
SIZE: A	CAGE CODE: 53919	DRAWN BY: HBAAKKE	ITEM NO.: PE3C1709LF/HS
REV: A	REV: A		REV: A