

Fire Rated SMA Male to SMB Plug Right Angle Low Loss Cable Using LMR-195-FR Coax



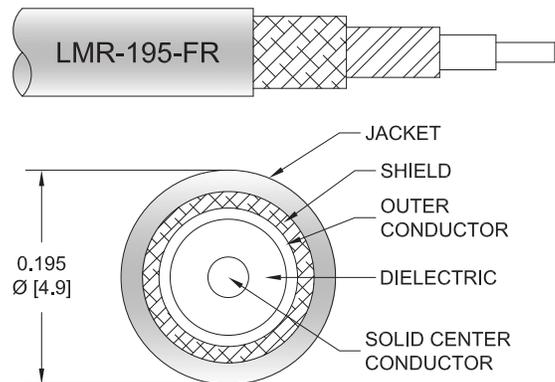
PE3W20460

Configuration

- Connector 1: SMA Male
- Connector 2: SMB Plug Right Angle
- 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 PE3W20460 SMA male to SMB plug right angle 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 SMB cable assembly has a male to plug gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3W20460 SMA male to SMB plug cable assembly operates to 4 GHz. The right angle SMB interface on the LMR-195-FR cable allows for easier connections in tight spaces. 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
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W20460	Custom Lengths Available	Insertion Loss (Typ.)	0.034	0.057	0.081	0.116	0.236	dB/ft	
			0.12	0.19	0.27	0.39	0.78	dB/m	
PE3W20460-12	12 In	Insertion Loss (Typ.)	0.34	0.36	0.39	0.42	0.54	dB	0.056
PE3W20460-24	24 In	Insertion Loss (Typ.)	0.37	0.42	0.47	0.54	0.78	dB	0.084
PE3W20460-36	36 In	Insertion Loss (Typ.)	0.41	0.48	0.55	0.65	1.01	dB	0.112
PE3W20460-48	48 In	Insertion Loss (Typ.)	0.44	0.53	0.63	0.77	1.25	dB	0.14
PE3W20460-60	60 in	Insertion Loss (Typ.)	0.47	0.59	0.71	0.88	1.48	dB	0.168

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:	0.2 dB
Base Weight:	0.056 pounds
Additional Weight per Inch:	0.00233 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.08 lbs [36.29 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	SMB Plug Right Angle
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	QQ-N-290	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	QQ-N-290	
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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PE3W20460

Typical Performance Data

How to Order

Part Number Configuration:

PE3W20460

- xx

uu

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

Example: PE3W20460-12 = 12 inches long cable
PE3W20460-100cm = 100 cm long cable

Fire Rated SMA Male to SMB Plug Right Angle Low Loss Cable Using LMR-195-FR Coax 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.

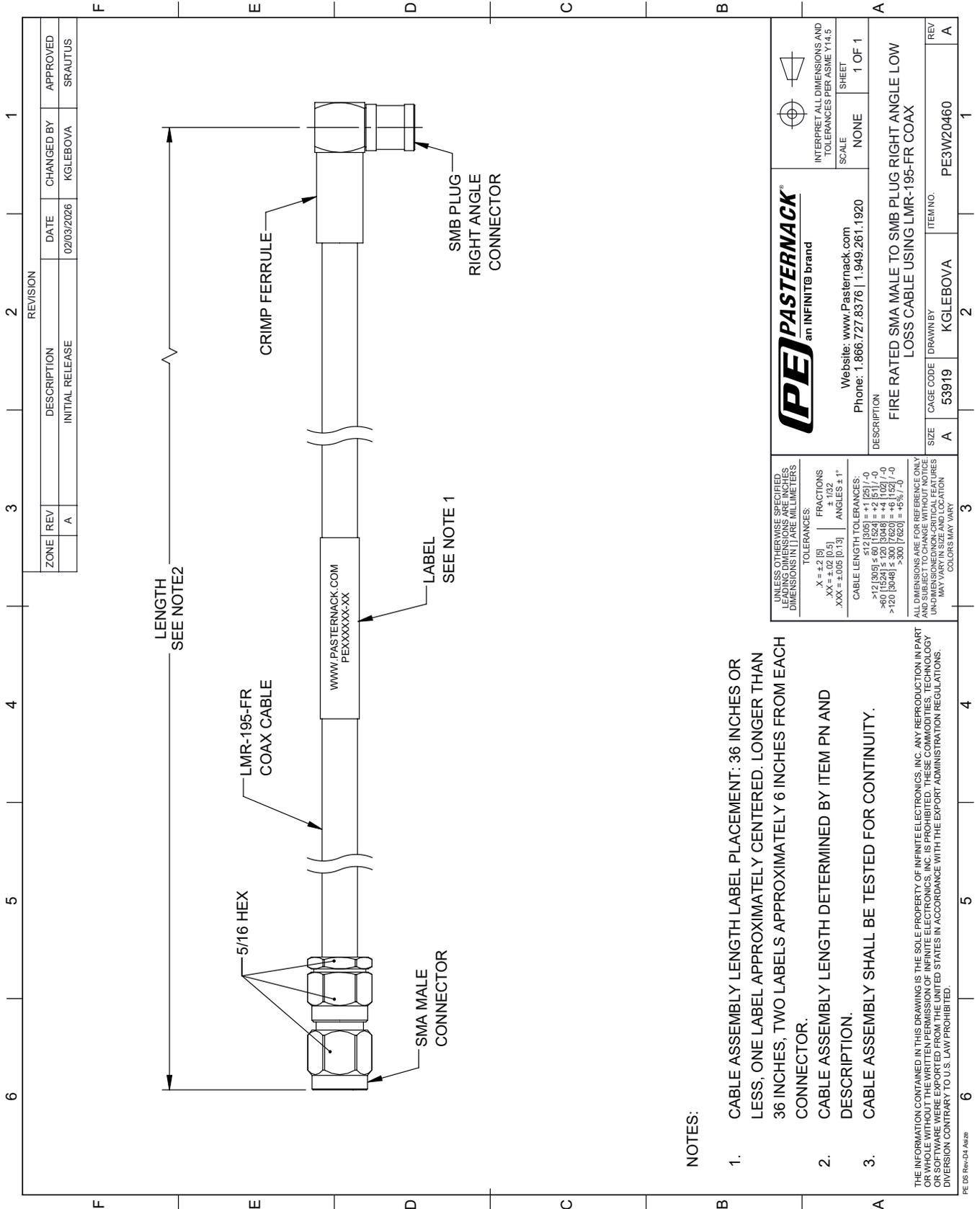
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to SMB Plug Right Angle Low Loss Cable Using LMR®-195-FR Coax PE3W20460](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-smb-plug-low-loss-cable-using-lmr-195-fr-pe3w20460-p.aspx>

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PE3W20460 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 LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE	NONE
SHEET 1 OF 1		SHEET 1 OF 1	
FIRE RATED SMA MALE TO SMB PLUG RIGHT ANGLE LOW LOSS CABLE USING LMR-195-FR COAX			
DESCRIPTION	SIZE	CAGE CODE	ITEM NO.
	A	53919	PE3W20460
DRAWN BY		REV	
KGLEBOVA		A	

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:

.X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ± 1/32
 .XXX = ±.005 [0.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.9 [23] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.