



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

### TECHNICAL DATA SHEET

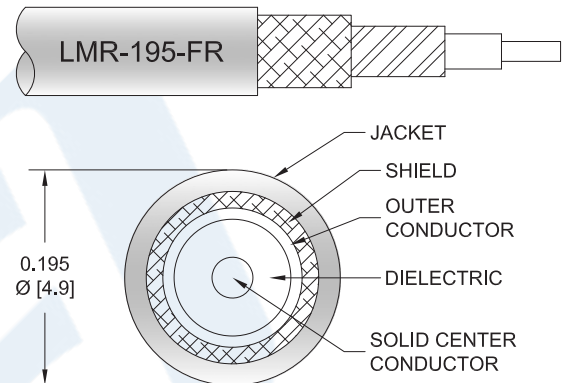
PE3W01461

#### Configuration

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

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W01461 SMA male right angle to SMA male 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3W01461 SMA male to SMA male cable assembly operates to 6 GHz. The right angle SMA interfaces on the LMR-195-FR cable allow 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.

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 SMA Male Right Angle Low Loss Cable Using LMR-195-FR Coax PE3W01461](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			3,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W01461	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	
PE3W01461-12	12 inch	Insertion Loss (Typ.)	0.46	0.49	0.52	0.59	0.7	dB	0.062
PE3W01461-24	24 inch	Insertion Loss (Typ.)	0.52	0.57	0.64	0.78	1	dB	0.091
PE3W01461-36	36 inch	Insertion Loss (Typ.)	0.58	0.65	0.76	0.97	1.3	dB	0.119
PE3W01461-48	48 inch	Insertion Loss (Typ.)	0.63	0.73	0.87	1.16	1.6	dB	0.147
PE3W01461-60	60 inch	Insertion Loss (Typ.)	0.69	0.81	0.99	1.35	1.9	dB	0.175

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: 0.2 dB  
 Base Weight: 0.062 pounds  
 Additional Weight per Inch: 0.00234 pounds

**Mechanical Specifications**

**Cable Assembly**

Weight 0.062 lbs [28.12 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]
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 Male Right Angle Threaded	SMA Male Right Angle Threaded
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100µ in. minimum	100µ in. minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100µ in. minimum	100µ in. minimum
Hex Size	5/16 in.	5/16 in.
Torque	5 in-lbs [0.57 Nm]	5 in-lbs [0.57 Nm]

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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**PE3W01461**

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**PE3W01461 - xx uu**

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

Example: PE3W01461-12 = 12 inches long cable  
PE3W01461-100cm = 100 cm long cable

Fire Rated SMA Male Right Angle to SMA Male 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.

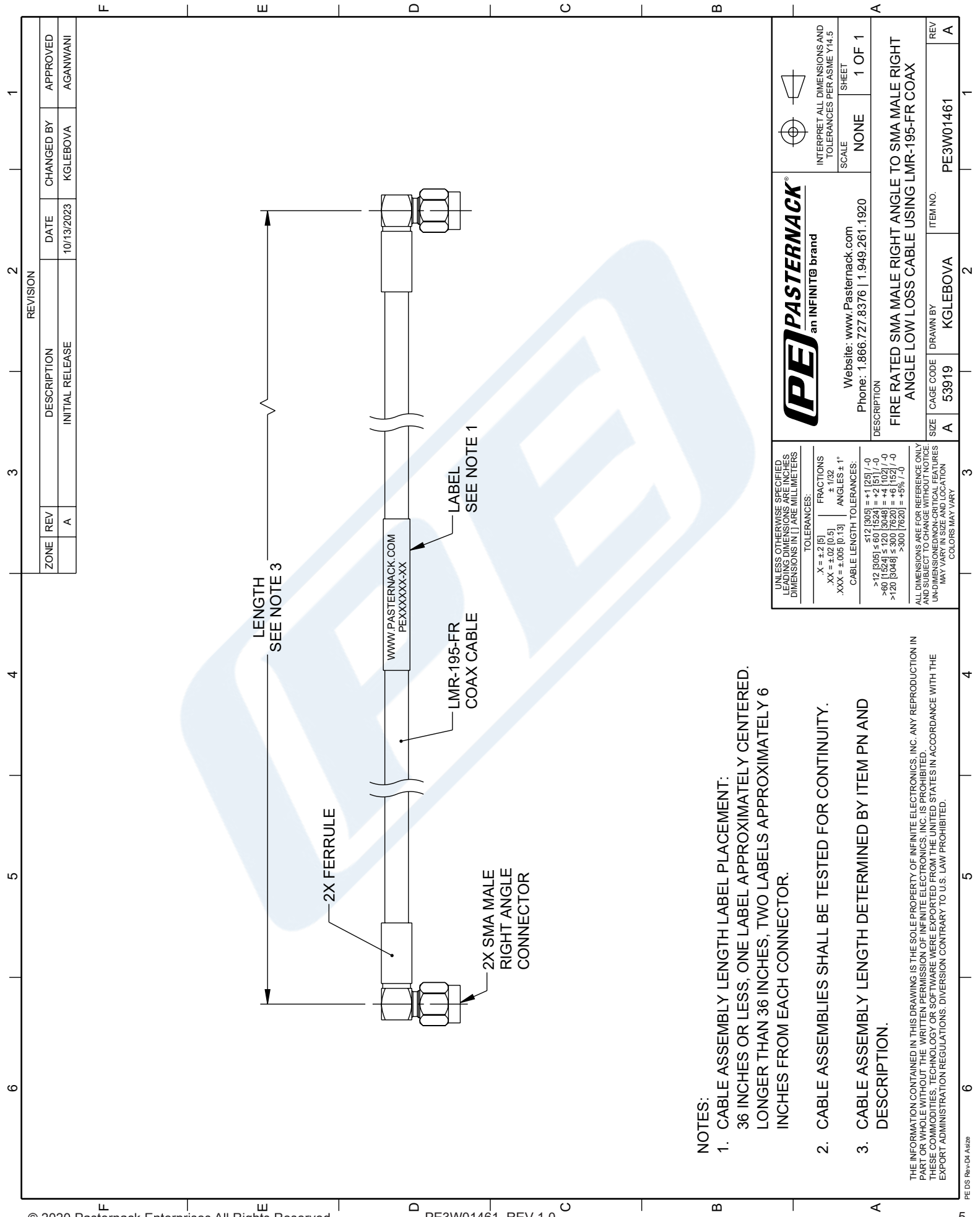
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-195-FR Coax PE3W01461](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-right-angle-to-sma-male-low-loss-cable-using-lmr-195-fr-pe3w01461-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.

# PE3W01461 CAD Drawing

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



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

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/13/2023	KGLEBOVA	AGANWANI

<p><b>PASTERNAK</b> an INFINITI® brand</p>		
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: <b>FIRE RATED SMA MALE RIGHT ANGLE TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-195-FR COAX</b>		
SIZE: A	CAGE CODE: 53919	DRAWN BY: KGLEBOVA
ITEM NO.: PE3W01461		REV: A

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES 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]	±.1 [25] / -0
>60 [1524]	±.2 [5] / -0
>120 [3048]	±.4 [10.2] / -0
>300 [7620]	±.6 [15.2] / -0
>300 [7620]	±.5% / -0

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