



Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-195-FR Coax With Times Microwave Components

RF Cable Assemblies Technical Data Sheet

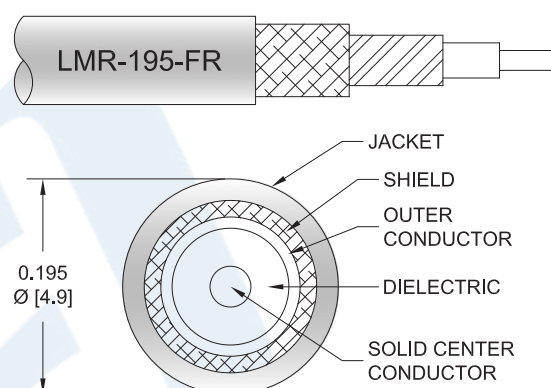
PE3C6869

Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: LMR-195-FR

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C6869 type N male to type N 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3C6869 type N male to type N male cable assembly operates to 5.8 GHz. The right angle type N 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-195-FR Coax With Times Microwave Components PE3C6869](#)



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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	0.11	0.19	0.29	dB/ft
	0.19	0.27	0.36	0.62	0.95	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.199 lbs [90.26 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

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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	N Male	N Male Right Angle
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80µ in. minimum
Hex Size	13/16 Inch	30
Torque	9 in-lbs [1.02 Nm]	

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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PE3C6869

How to Order

Part Number Configuration:

PE3C6869

- **xx**

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

Example: PE3C6869-12 = 12 inches long cable
PE3C6869-100cm = 100 cm long cable

Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-195-FR Coax With Times Microwave Components 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.

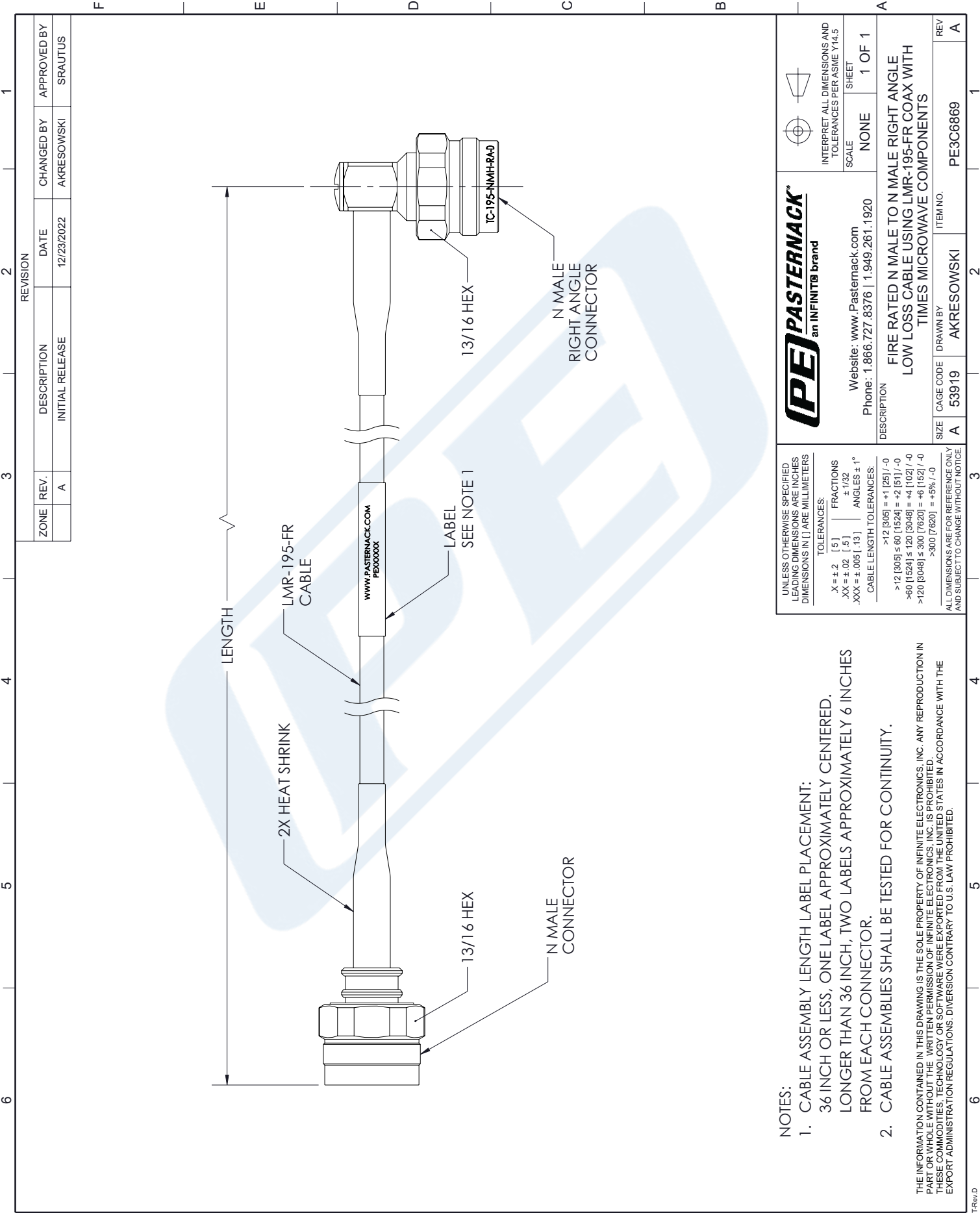
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-195-FR Coax With Times Microwave Components PE3C6869](https://www.pasternack.com/fire-rated-n-male-to-n-male-right-angle-low-loss-cable-using-lmr-195-fr-coax-with-times-microwave-components-pe3c6869)

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PE3C6869 CAD Drawing

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NOTES:

- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT:
36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED.
LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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TOLERANCES:	FRACTIONS
X = ± .2	[5]
.XX = ± .02	[.5]
.XXX = ± .005	[.13]
CABLE LENGTH TOLERANCES:	
ANGLES ± 1°	
± 1/32	
>12 [305] = +1 [25] / -0	
>60 [1524] = +2 [51] / -0	
>120 [3048] = +4 [102] / -0	
>300 [7620] = +8 [152] / -0	
>600 [15240] = +16 [305] / -0	
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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
SCALE	SHEET
NONE	1 OF 1
DESCRIPTION FIRE RATED N MALE TO N MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-195-FR COAX WITH TIMES MICROWAVE COMPONENTS	
SIZE	REV
A	A
CAGE CODE	ITEM NO.
53919	PE3C6869
DRAWN BY	
AKRESOWSKI	