



## SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax

### TECHNICAL DATA SHEET

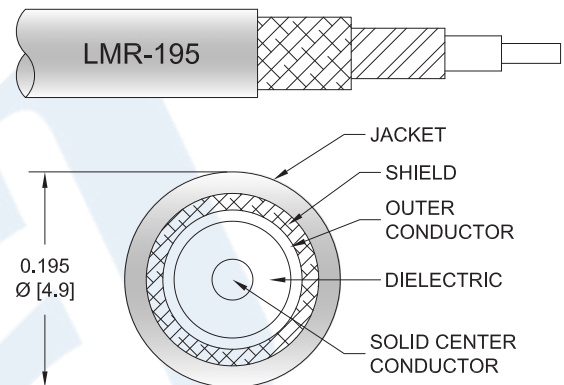
PE3C1209

#### Configuration

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

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1209 SMA male to SMA female bulkhead cable using LMR-195 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 female gender configuration with 50 ohm flexible LMR-195 coax. The PE3C1209 SMA male to SMA female cable assembly operates to 5.8 GHz. Our RF cable assembly with SMA 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3C1209](#)



## SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax

### TECHNICAL DATA SHEET

**PE3C1209**

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
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	250	500	1000	2500	5800	MHz	
PE3C1209	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	
PE3C1209-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.051
PE3C1209-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.074
PE3C1209-36	36 inch	Insertion Loss (Typ.)	0.38	0.45	0.55	0.77	1.1	dB	0.096
PE3C1209-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.118
PE3C1209-60	60 inch	Insertion Loss (Typ.)	0.49	0.61	0.78	1.15	1.7	dB	0.14

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:	0.051 pounds
Additional Weight per Inch:	0.00075 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.051 lbs [23.13 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3C1209](#)



## SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax

### TECHNICAL DATA SHEET

**PE3C1209**

#### Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, 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 Threaded	SMA Female Bulkhead Threaded
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50µ in. minimum	50 µin minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100µ in. minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100µ in. minimum	
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

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

#### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3C1209](#)



## SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax

### TECHNICAL DATA SHEET

**PE3C1209**

#### How to Order

Part Number Configuration:

**PE3C1209**

- **xx**

**uu**

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

Example: PE3C1209-12 = 12 inches long cable  
PE3C1209-100cm = 100 cm long cable

SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 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: [SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax PE3C1209](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-bulkhead-low-loss-cable-using-lmr-195-pe3c1209-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.

PE3C1209 CAD Drawing

SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax

F

E

D

C

B

A

F

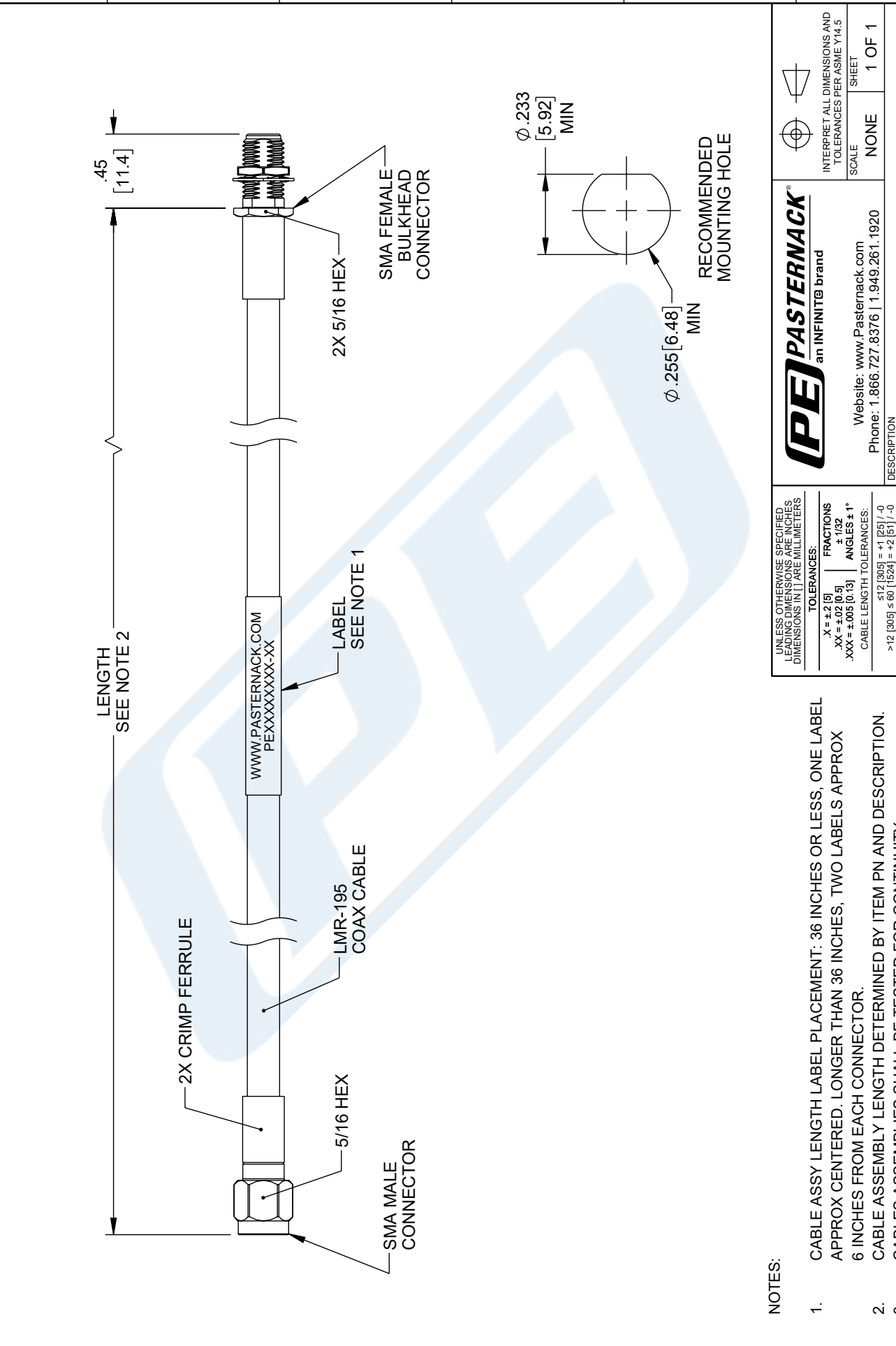
E

D

C

B

A



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
.XX = ±.02 [0.5]	± 1/64
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
≤12 [305] = ±1 [25] / -0	
>12 [305] ≤60 [1524] = +2 [51] / -0	
>60 [1524] ≤120 [3048] = +4 [102] / -0	
>120 [3048] = +5 [127] / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	

<b>PE PASTERNAK</b> an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.Pasternack.com Phone: 1.866.727.8376   1.949.261.1920		SCALE NONE
DESCRIPTION SMA Male to SMA Female Bulkhead Low Loss Cable Using LMR-195 Coax		SHEET 1 OF 1
SIZE A	CAGE CODE 53919	ITEM NO. PE3C1209
DRAWN BY KDANG	REV A	

1

2

3

4

5

6

1

2

3

4

5

6