



## 1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax

### RF Cable Assemblies Technical Data Sheet

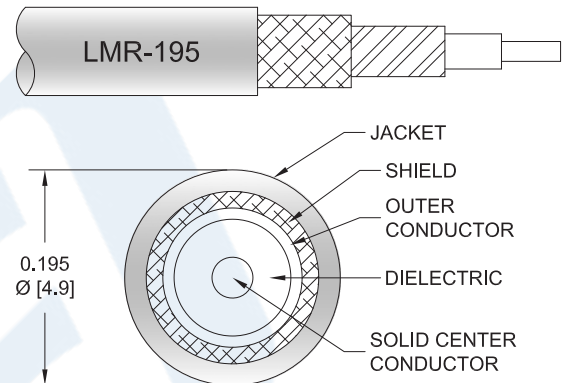
**PE3W12689**

#### Configuration

- Connector 1: 1.0/2.3 Plug
- Connector 2: N Male
- Cable Type: LMR-195

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W12689 1.0/2.3 plug to type N male 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 1.0/2.3 to type N cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-195 coax. The PE3W12689 1.0/2.3 plug to type N male cable assembly operates to 4 GHz. 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: [1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax PE3W12689](#)



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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	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]
Operating Voltage (AC)			250	Vrms
Jacket Spark			3,000	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.034	0.057	0.081	0.116	0.239	dB/ft
	0.11	0.19	0.27	0.38	0.78	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.123 lbs [55.79 g]

#### 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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax PE3W12689](#)



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**PE3W12689**

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	1.0/2.3 Plug	N Male
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating		Brass, Tri-Metal
Hex Size		13/16 Inch
Torque		9 in-lbs [1.02 Nm]

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax PE3W12689](#)



## 1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3W12689**

#### How to Order

Part Number Configuration:

**PE3W12689**

- **xx**

**uu**

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

Example: PE3W12689-12 = 12 inches long cable  
PE3W12689-100cm = 100 cm long cable

1.0/2.3 Plug to N Male 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.

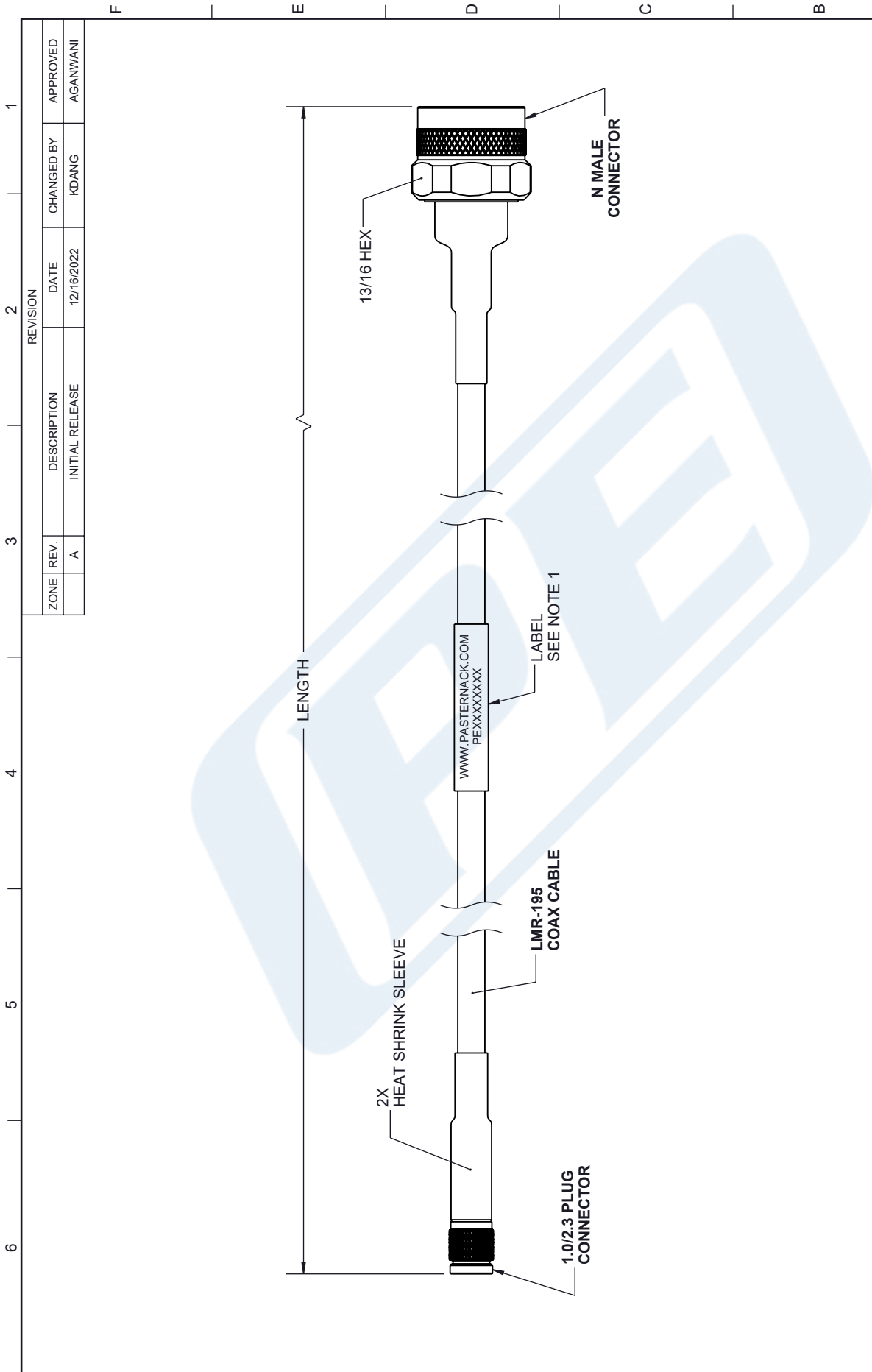
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax PE3W12689](https://www.pasternack.com/1.0-2.3-plug-to-n-male-low-loss-cable-using-lmr-195-pe3w12689-p.aspx)

URL: <https://www.pasternack.com/1.0-2.3-plug-to-n-male-low-loss-cable-using-lmr-195-pe3w12689-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.

# PE3W12689 CAD Drawing

## 1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [ .5 ]    FRACTIONS ± 1/32</p> <p>XX = ±.02 [ .5 ]    ANGLES ± 1°</p> <p>.XXX = ±.005 [ .13 ]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&gt;12 [305] = +1 [25] / -0</p> <p>&gt;12 [305] ≤ 60 [1524] = -2 [51] / -0</p> <p>&gt;60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>&gt;120 [3048] ≤ 300 [7620] = +6 [152] / -0</p> <p>&gt;300 [7620] = +5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE</p>	<p><b>PE PASTERNAK</b> an INFINITE brand</p> <p>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: 1.0/2.3 Plug to N Male Low Loss Cable Using LMR-195 Coax</p>		
<p>SIZE: A</p>	<p>CAGE CODE: 53919</p>	<p>DRAWN BY: KDANG</p>
<p>ITEM NO.: PE3W12689</p>		<p>REV: A</p>

**NOTES:**

- 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.
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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