



RF Connectors
Technical Data Sheet

PE4031

# Configuration

- SMA Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry

- RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 Interface Type
- Clamp/Solder Attachment

## **Features**

Gold Plated Contact

Contact plating according to MIL-G-45204

# **Applications**

General Purpose Test

Custom Cable Assemblies

## **Description**

Pasternack's PE4031 SMA female connector with clamp/solder attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195 and LMR-195 is part of our full line of RF components available for same-day shipping.

Our SMA female connector PE4031 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

## **Mechanical Specifications**

## Size

 Length
 0.705 in [17.91 mm]

 Width/Dia.
 0.312 in [7.92 mm]

 Weight
 0.009 lbs [4.08 g]

### **Material Specifications**

Description	Material	Plating
Contact		Gold MIL-G-45204
Insulation	PTFE	
Body	Brass	Nickel QQ-N-290

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 PE4031

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**Environmental Specifications** 

Compliance Certifications (see product page for current document)

Plotted and Other Data Notes:

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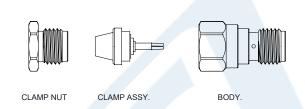




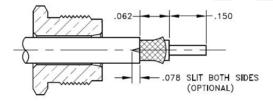
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### **Assembly Instruction**

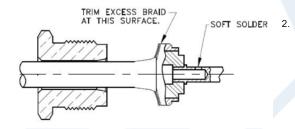


#### CABLE ASSEMBLY INSTRUCTIONS.

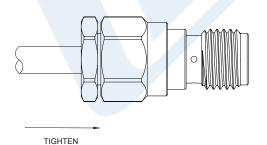


SLIDE NUT ONTO CABLE AS SHOWN. CUT CABLE SQUARE.
TRIM CABLE TO DIMENSIONS SHOWN BEING CAREFUL NOT
TO NICK THE BRAID OR CENTER CONDUCTOR. ROTATE
DIELECTRIC TO FLARE BRAID.

NOTE: TWO SLITS IN THE JACKET 180° APART AS SHOWN MAY BE NEEDED TO PRESS JACKET TO SHOULDER.



SLIDE CLAMP ASSY OVER DIELECTRIC AND UNDER BRAID UNTIL THE DIELECTRIC BOTTOMS OUT IN CLAMP AND THE CENTER CONDUCTOR IS VISIBLE INSIDE HOLE OF CONTACT. SOLDER THE CONTACT ONTO THE CENTER CONDUCTOR. DO NOT OVERHEAT!.



INSERT THE ASSEMBLY INTO THE REAR BODY. HOLD THE NUT STATIONARY AND TIGHTEN THE BODY TO 15 IN LBS.

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SMA Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 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 Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195 PE4031

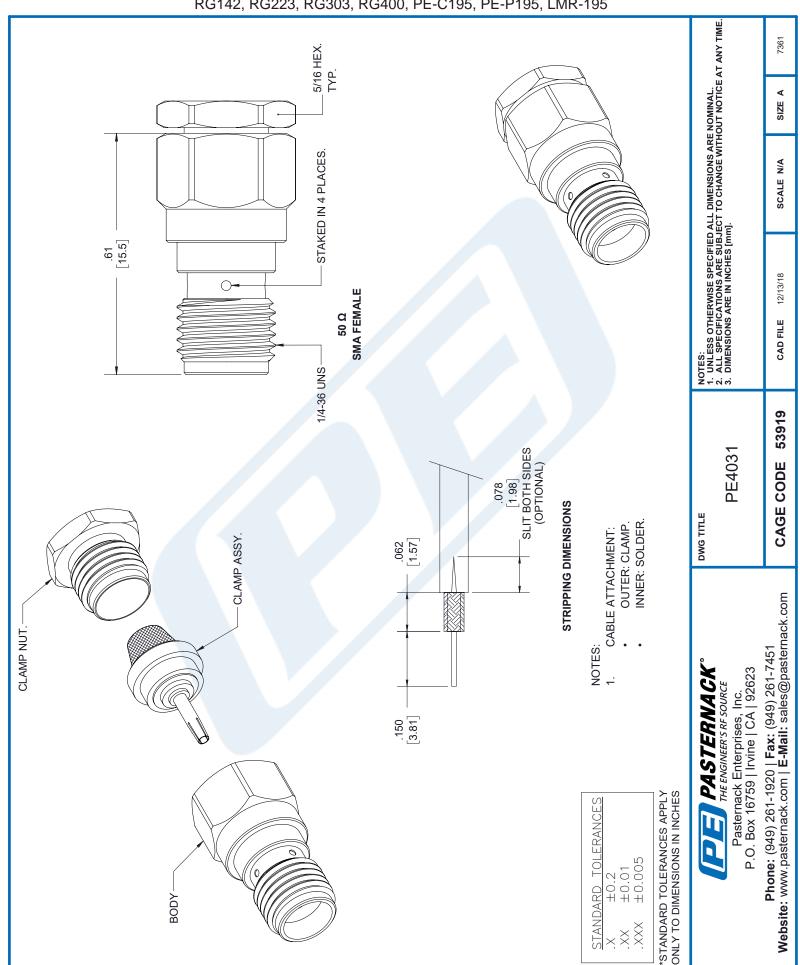
URL: https://www.pasternack.com/sma-female-standard-rg58-rg55-rg142-rg223-rg400-connector-pe4031-p.aspx

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.

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# PE4031 CAD Drawing

SMA Female Connector Clamp/Solder Attachment for RG55, RG58, RG141, RG142, RG223, RG303, RG400, PE-C195, PE-P195, LMR-195







BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch

# RF Connectors Technical Data Sheet

**PE4070** 

# Configuration

- BNC Female Connector
- MIL-STD-348A
- 50 Ohms

# Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.3:1

- Straight Body Geometry
- Connector Interface Types: PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, .195 inch
- Gold Plated Brass Contact
- · 30 µin minimum contact plating

# **Applications**

General Purpose Test

Custom Cable Assemblies

## **Description**

Pasternack's PE4070 BNC female connector with crimp/solder attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195 and .195 inch is part of our full line of RF components available for same-day shipping. Our BNC female connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1.

Our BNC female connector PE4070 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.3:1	
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Inner Conductor DC Resistance			1.5	mOhms
Outer Conductor DC Resistance			0.5	mOhms
Insulation Resistance	5,000			MOhms

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3					GHz
Insertion Loss, Max	0.2					dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch PE4070

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BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch

# RF Connectors Technical Data Sheet

**PE4070** 

Electrical Specification Notes: RF leakage: 55 dB min at 3 GHz.

## **Mechanical Specifications**

Size

 Length
 1.425 in [36.2 mm]

 Width/Dia.
 0.57 in [14.48 mm]

 Height
 0.57 in [14.48 mm]

 Weight
 0.032 lbs [14.51 g]

 Mating Cycles
 500 Cycles

## **Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 μin minimum

## **Environmental Specifications**

**Temperature** 

Operating Range -65 to +165 deg C

Vibration MIL-STD-202, Method 204, Condition B
Temperature Cycle MIL-STD-202, Method 107, Condition B
Salt Spray MIL-STD-202, Method 101, Condition B

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: BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch PE4070

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**PE4070** 

BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch 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.

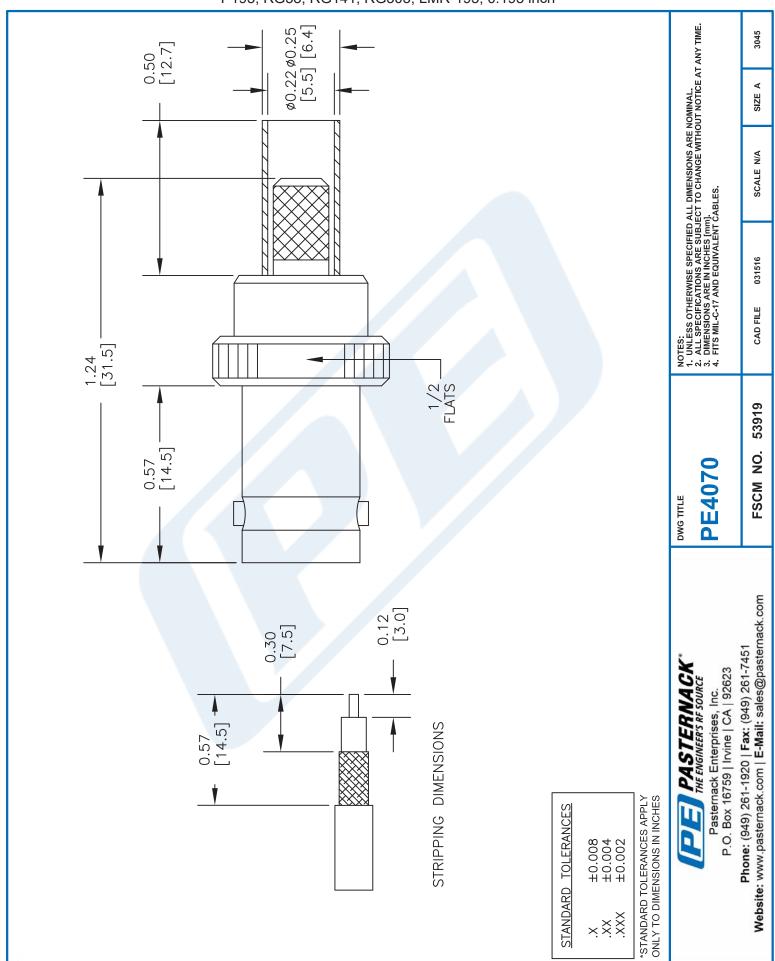
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch PE4070

URL: https://www.pasternack.com/bnc-female-standard-rg58-connector-pe4070-p.aspx

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# PE4070 CAD Drawing

BNC Female Connector Crimp/Solder Attachment for PE-C195, PE-P195, RG58, RG141, RG303, LMR-195, 0.195 inch





# LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax



## LMR-195-UF



# **Times Microwave Systems Connector Specification**

### Configuration

- · Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

#### **Features**

- · Ultra Flexible Coax with Stranded Center Conductor
- · Max Operating Frequency of 8 GHz
- · Phase Velocity 74% VoP

## **Applications**

- · RF Test Systems
- Antenna Installs
- · Laboratory Applications

- Max Operating Temperature +85°C
- TPE Jacket
- · Min Install Bend Radius of 0.5 inches
- · General Purpose RF Interconnect
- Jumper Assemblies

## **Description**

LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-195-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-195-UF is constructed with a 0.195 inch diameter and Black TPE jacket.

LMR-195-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.195 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-195-UF TPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-195-UF coax cable provides specs for this wire on its RF coax cable LMR-195-UF datasheet.

LMR-195-UF cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss ultra flexible LMR-195-UF coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		74		%
Time Delay		1.27 [4.17]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Jacket Spark			3,000	Vrms
Inner Conductor DC Resistance			9.5	Ohms/1000ft
Outer Conductor DC Resistance			4.9	Ohms/1000ft

<sup>\*</sup> LMR™ is a trademark of Times Microwave Systems.



# LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax



# **LMR-195-UF**

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Nominal Capacitance		25.4 [83.33]		pF/ft [pF/m]
Nominal Inductance		0.064 [0.21]		uH/ft [uH/m]
Input Power (Peak)			2.5	kWatts

## **Performance by Frequency Band**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	3	5.3	6.4	9.3	13.2	dB/100ft
	9.84	17.39	21	30.51	43.31	dB/100m
Input Power (CW), Max	610	350	280	200	140	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	17.3	19	20.1	22.6	35.6	dB/100ft
	56.76	62.34	65.94	74.15	116.8	dB/100m
Input Power (CW), Max	100	90	90	80	50	Watts

## **Mechanical Specifications**

Diameter Weight

Min. Bend Radius (Installation) Min. Bend Radius (Repeated)

Bending Moment Tensile Strength Flat Plate Crush 0.195 in [4.95 mm] 0.021 lbs/ft [0.03 kg/m] 0.5 in [12.7 mm] 2 in [50.8 mm]

0.1 lbs-ft [0.14 N-m] 40 lbs [18.14 kg] 10 lbs/in [0.18 kg/mm]

## **Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.038 in [0.97 mm]
Conductor Type	Stranded	
Dielectric	Foam PE	0.11 in [2.79 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper	
Jacket	TPE, Black	0.195 in [4.95 mm]



# LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax



## LMR-195-UF

## **Environmental Specifications**

**Temperature** 

Operating Range -40 to 85 deg C
Installation Range -40 to 85 deg C
Storage Range -70 to 85 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

LMR-195-UF Ultra Flex version of the 195 series Low Loss 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: LMR-195-UF Ultra Flex version of the 195 series Low Loss Coax LMR-195-UF

URL: https://www.pasternack.com/low-loss-flexible-lmr-195-uf-tpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-195-uf-p.aspx

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