



## SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195

### RF Connectors Technical Data Sheet

PE4413

#### Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG58, RG303, RG141, PE-C195, PE-P195, LMR-195

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.28:1
- Gold Plated Beryllium Copper Contact
- 50 $\mu$  in. minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4413 SMA female connector with crimp/solder attachment for RG58, RG303, RG141, 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 operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.28:1.

Our SMA female connector PE4413 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		12.4	GHz
VSWR			1.28:1	
Operating Voltage (AC)			500	Vrms

#### Mechanical Specifications

<b>Size</b>	
Length	0.893 in [22.68 mm]
Width/Dia.	0.25 in [6.35 mm]
Weight	0.008 lbs [3.63 g]

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 Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 PE4413](#)



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

RF Connectors  
Technical Data Sheet

PE4413

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold 50µ in. minimum
Insulation	PTFE	
Body	Brass	Nickel 100µ in. minimum

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 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: [SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 PE4413](#)

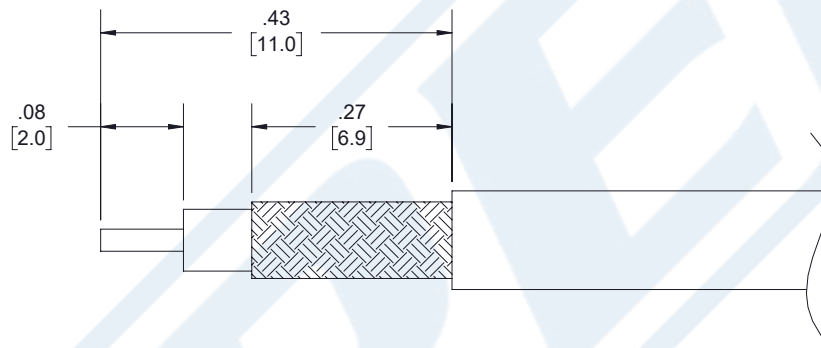


## SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195

### RF Connectors Technical Data Sheet

PE4413

#### Assembly Instruction



#### **ASSEMBLY PROCEDURES**

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
3. FLARE BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
4. SLIDE FERRULE OVER BRAID AND CRIMP WITH CRIMP TOOL.

#### **CRIMP SIZE REQUIRED**

- CONTACT: SOLDER.
- FERRULE: .213" HEX CRIMP TOOL.

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 Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 PE4413](#)



## SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195

### RF Connectors Technical Data Sheet

PE4413

SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, 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.

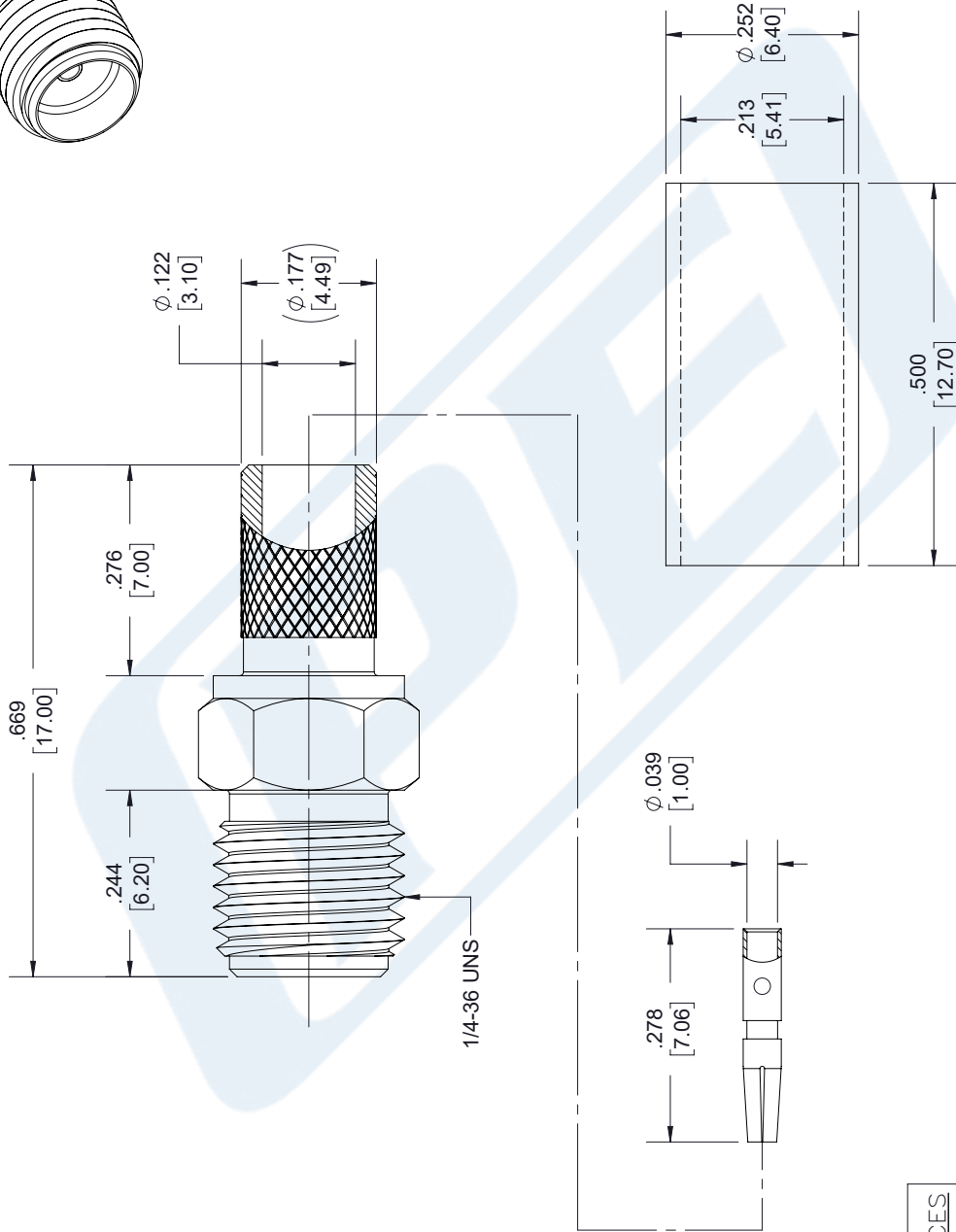
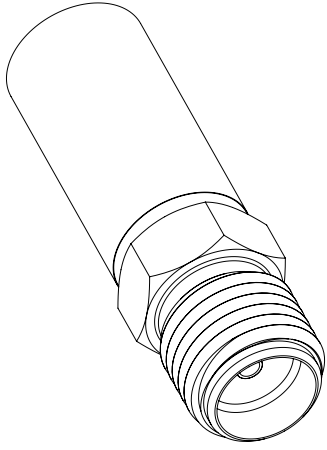
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 PE4413](https://www.pasternack.com/sma-female-standard-rg58-connector-pe4413-p.aspx)

URL: <https://www.pasternack.com/sma-female-standard-rg58-connector-pe4413-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.

# PE4413 CAD Drawing

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



STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE4413**

CAGE CODE **53919**

CAD FILE 110917

SCALE N/A

SIZE A

7361

**PE PASTERNAK®**  
 THE ENGINEER'S RF SOURCE  
 Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** www.pasternack.com | **E-Mail:** sales@pasternack.com



# SMA Female Bulkhead Connector Crimp/Solder Attachment For RG58, .235 inch D Hole

## RF Connectors Technical Data Sheet

PE4420

### Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG58
- Bulkhead

### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.3:1
- Gold Plated Beryllium Copper Contact
- 50 µin minimum contact plating

### Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

### Description

Pasternack's PE4420 SMA female bulkhead connector with crimp/solder attachment for RG58 (.235 inch D hole) is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.3:1. This SMA bulkhead connector 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.

Our SMA female bulkhead connector PE4420 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		12.4	GHz
VSWR			1.3:1	
Operating Voltage (AC)			500	Vrms

### Mechanical Specifications

Weight 0.013 lbs [5.9 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Connector Crimp/Solder Attachment For RG58, .235 inch D Hole PE4420](#)



SMA Female Bulkhead Connector Crimp/Solder Attachment For RG58, .235 inch D Hole

RF Connectors  
Technical Data Sheet

PE4420

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Crimp Sleeve	Brass	Nickel
Washer	Brass	Nickel

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

SMA Female Bulkhead Connector Crimp/Solder Attachment For RG58, .235 inch D Hole 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 Bulkhead Connector Crimp/Solder Attachment For RG58, .235 inch D Hole PE4420](#)

URL: <https://www.pasternack.com/sma-female-standard-rg58-connector-pe4420-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.





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

### RF Cables Technical Data Sheet



LMR-195-UF

## Times Microwave Systems Coax Cable Specification

### Configuration

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

### Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 74% VoP
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 0.5 inches

### Applications

- RF Test Systems
- Antenna Installs
- Laboratory Applications
- 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 5.8 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.

\* LMR™ is a trademark of Times Microwave Systems.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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

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](#)



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

### RF Cables Technical Data Sheet



LMR-195-UF

Jacket Spark		3,000	Vrms
Inner Conductor DC Resistance		9.5	Ohms/1000ft
Outer Conductor DC Resistance		4.9	Ohms/1000ft
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	0.195 in 4.95 mm
Weight	0.021 lbs/ft [0.03 Kg/m]
Min. Bend Radius (Installation)	0.5 in [12.7 mm]
Min. Bend Radius (Repeated)	2 in [50.8 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Tensile Strength	40 lbs [18.14 kg]
Flat Plate Crush	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]

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](#)



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

RF Cables  
Technical Data Sheet



LMR-195-UF

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]

**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>

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.

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	06-04-2021
		APPROVED
		SELLIS



UNLESS OTHERWISE SPECIFIED  
 LEADING DIMENSIONS ARE INCHES  
 DIMENSIONS IN [ ] ARE MILLIMETERS

**TOLERANCES:**  
 .X = ±.2 [ .008]    FRACTIONS ± 1/32  
 .XX = ±.02 [ .51]    ANGLES ± 1°  
 .XXX = ±.005 [ .13]

**CABLE LENGTH (L), TOLERANCES:**  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN  
 ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
 an INFINITI brand

Pasternack Enterprises, Inc.  
 P. O. Box 16759, Irvine, CA 92623.  
 Phone: 1.949.261.1920 | 1.866.727.8376  
 Fax: 1.949.261.7451  
 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

ITEM NO. LMR-195-UF

SIZE A    DRAWN BY MVEERAPPAN

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

REV A