

SMB Plug Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch



## **RF Connectors Technical Data Sheet**

## **PE4522**

#### Configuration

- SMB Plug Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry

#### Features

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

#### Applications

General Purpose Test

- RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch Interface Type
  Crimp/Solder Attachment
- Gold Plated Beryllium Copper Contact
  30 µin minimum contact plating
- Custom Cable Assemblies

#### Description

Pasternack's PE4522 SMB plug right angle connector with crimp/solder attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 and 0.195 inch is part of our full line of RF components available for same-day shipping. Our SMB plug connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMB plug right angle connector PE4522 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)			335	Vrms

#### **Mechanical Specifications**

0.77 in [19.56 mm]
0.275 in [6.99 mm]
0.551 in [14 mm]
0.016 lbs [7.26 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMB Plug Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch PE4522

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

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**PE4522** 

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## **RF Connectors Technical Data Sheet**

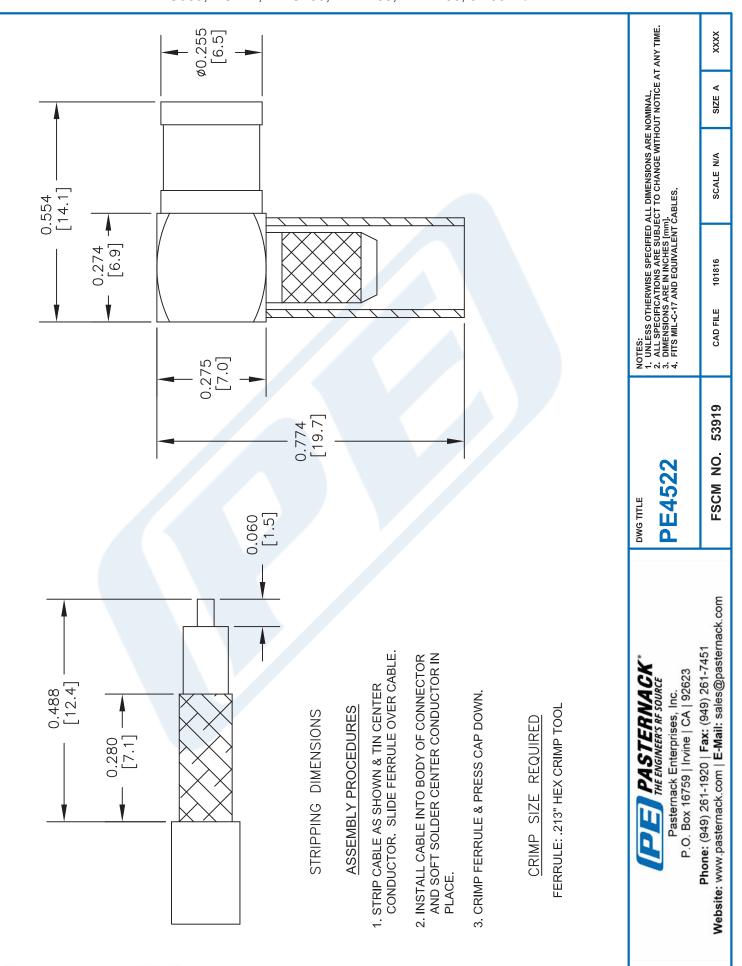
Description	Material	Plating
Contact	Beryllium Copper	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
vironmental Specifications		
Temperature Operating Range	65 to 11	165 deg C
Operating Kange	-03 10 + 1	
ompliance Certifications (see pr	oduct page for current document)	
otted and Other Data Notes:		
h from Pasternack Enterprises has limeter wave products maintain a 99 ck the following link (or enter part n	same day shipment for domestic an 3% availability and are part of the broa number in "SEARCH" on website) to o Right Angle Connector Crimp/Solder A	3, RG141, PE-C195, PE-P195, LMR-195, 0.19 d International orders. Our RF, microwave an dest selection in the industry. btain additional part information including price Attachment for RG58, RG303, RG141, PE-C195
21 · https://www.pasterpack.com/smb	o-plug-standard-rg58-connector-pe452	2-n asny
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ke modifications to the part and/or the docume equired. Unless otherwise stated, all specifica	entation of the part, in order to implement improve	entative of the part described herein. It may be necessary ements. Pasternack reserves the right to make such change y representation or warranty regarding the suitability of the pa out of the use of any part or documentation.

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# PE4522 CAD Drawing

SMB Plug Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch





SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch



## **RF Connectors Technical Data Sheet**

## **PE4405**

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.4:1

#### **Applications**

General Purpose Test

- RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, .195 inch Interface Type
- Crimp/Solder Attachment
- 5/16 inch Hex

Gold Plated Brass Contact

- 50 µin minimum contact plating
- Custom Cable Assemblies

#### Description

Pasternack's PE4405 SMA male right angle connector with crimp/solder attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195 and .195 inch is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.4:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE4405 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			1.4:1	
Operating Voltage (AC)			500	Vrms

#### **Mechanical Specifications**

Size	
Length	0.8 in [20.32 mm]
Width/Dia.	0.315 in [8.00 mm]
Height	0.65 in [16.51 mm]
Weight	0.017 lbs [7.71 g]
Mating Torque	3 to 5 in-lbs [0.34 to 0.57 Nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch PE4405

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SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch



## **RF Connectors Technical Data Sheet**

**PE4405** 

#### **Material Specifications** Material Description Plating Brass Gold Contact 50 µin minimum PTFE Insulation Body Brass Nickel 100 µin minimum Coupling Nut Brass Nickel 100 µin minimum Brass Nickel Crimp Sleeve

#### **Environmental Specifications**

Temperature Operating Range

-65 to +165 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

**Assembly Instruction** 

SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, 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: SMA Male Right Angle Connector Crimp/Solder Attachment for RG58, RG303, RG141, PE-C195, PE-P195, LMR-195, 0.195 inch PE4405

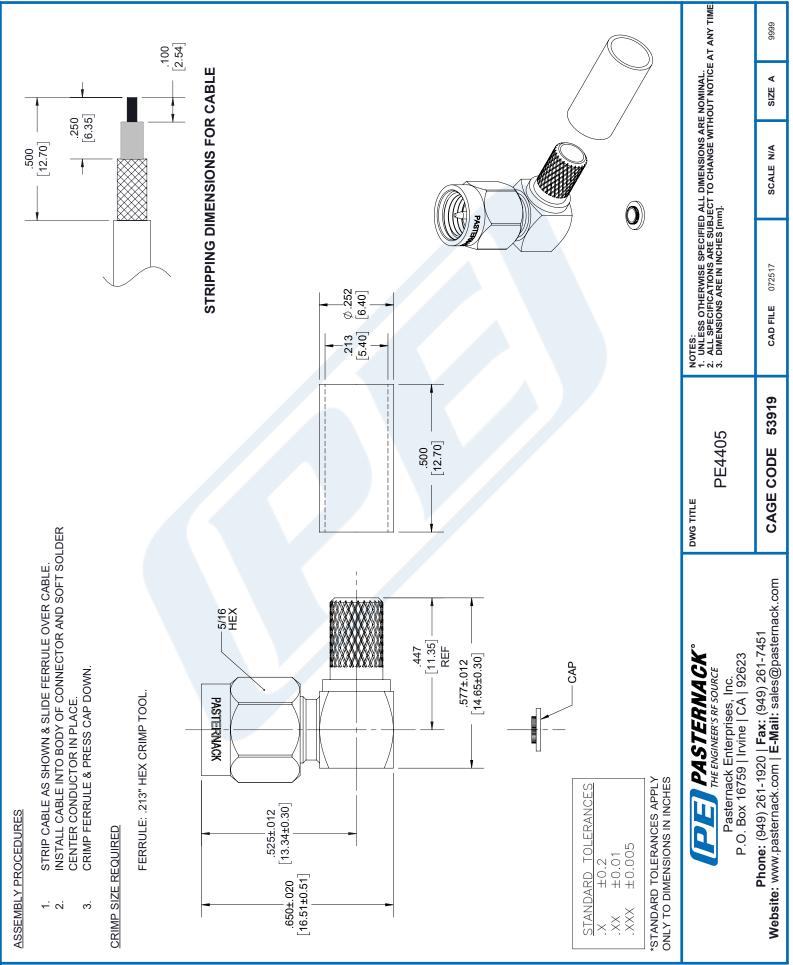
URL: https://www.pasternack.com/sma-male-standard-rg58-connector-pe4405-p.aspx

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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SMA Male Right Angle Connector Crimp/Solder Attachment for RG58,





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# LMR<sup>®</sup>-195 Flexible Low Loss Communications Coax Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
- Drop-in replacement for RG-58 and RG-142

• LMR<sup>®</sup> standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.

LMR<sup>®</sup>- DB is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.
LMR<sup>®</sup>- FR is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.

• LMR\*- FR-PVC is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.

• LMR<sup>•</sup>- PVC is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.

• LMR\*- PVC-W is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.

• LMR<sup>®</sup>- MA is a flexible cable designed specifically for mobile antenna applications. It has a PVC jacket and un-bonded aluminum tape to facilitate end stripping with automated equipment.

• **Flexibility** and bendability are hallmarks of the LMR-195 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance. • Low Loss is another hallmark feature of LMR-195. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

LWR 109 TIMES MI

• **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).

• Weatherability: LMR-195 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.

• **Connectors**: A wide variety of connectors are available for LMR-195 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

• **Cable Assemblies**: All LMR-195 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

	<b>Part Description</b>			Stock
Part Number	Application	Jacket	Color	Code
LMR-195	Outdoor	PE	Black	54110
LMR-195-DB	Outdoor/Watertight	PE	Black	54113
LMR-195-FR	Indoor/Outdoor Riser CMR	FRPE	Black	54111
LMR-195-FR-W	Indoor/Outdoor Riser CMR	FRPE	White	54158
LMR-195-FR-P	VC Indoor/Outdoor Riser CM	MR FRP	/C Black	54105
LMR-195-MA	Mobile Antennas	PVC	Black	54210
LMR-195-PVC	General Purpose	PVC	Black	54215
LMR-195-PVC-	W General Purpose	PVC	White	54199

<b>Construction Specifications</b>							
Description	Material	ln.	(mm)				
Inner Conductor	Solid BC	0.037	(0.94)				
Dielectric	Foam PE	0.110	(2.79)				
Outer Conductor	Aluminum Tape	0.116	(2.95)				
Overall Braid	Tinned Copper	0.139	(3.53)				
Jacket	(see table above)	0.195	(4.95)				

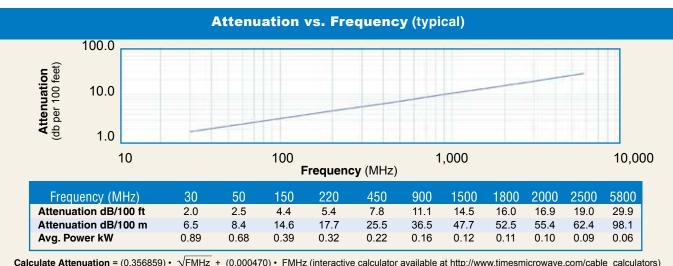


Mechanical Specifications									
Performance Property	Units	US	(metric)						
Bend Radius: installation	in. (mm)	0.5	(12.7)						
Bend Radius: repeated	in. (mm)	2.0	(50.8)						
Bending Moment	ft-lb (N-m)	0.2	(0.27)						
Weight	lb/ft (kg/m)	0.021	(0.03)						
Tensile Strength	lb (kg)	40	(18.2)						
Flat Plate Crush	lb/in. (kg/mm)	15	(0.27)						

OWAVE

Environmental Spec	ification	S	
Performance Property	۴F	°C	
Installation Temperature Range	-40/+185	-40/+85	
Storage Temperature Range	-94/+185	-70/+85	
Operating Temperature Range	-40/+185	-40/+85	

Electri	cal Specificat	tions	
Performance Property	Units	US	(metric)
Velocity of Propagation	%	76	
Dielectric Constant	NA	1.56	
Time Delay	nS/ft (nS/m)	1.27	(4.17)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	25.4	(83.3)
Inductance	uH/ft (uH/m)	0.064	(0.21)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	7.6	(24.9)
Outer Conductor	ohms/1000ft (/km)	4.9	(16.1)
Voltage Withstand	Volts DC	1000	
Jacket Spark	Volts RMS	3000	
Peak Power	kW	2.5	



Calculate Attenuation = (0.356859) • √FMHz + (0.000470) • FMHz (interactive calculator available at http://www.timesmicrowave.com/cable\_calculators) Attenuation: VSWR=1.0; Ambient = +25°C (77°F) Power: VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F); Sea Level; dry air; atmospheric pressure; no solar loading





## **Connectors**

Interface	Description	Part Number	Stock Code	VSWR** Freq. (GHz)	Coupling Nut	Inner Contact Attach	Outer Contact Attach	Finish* Body /Pin	Length in (mm)	Width in (mm)	Weight Ib (g)
N male	Straight Plug	TC-195-NM	3190-1555	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.5 (38.1)	0.75 (19.1)	0.073 (33.1)
N male	Right Angle	TC-195-NMH-RA-D	3190-2425	<1.35:1 (6)	Hex/Knurl	Solder	Crimp	A/G	1.3 (32.1)	1.19 (30.1)	0.083 (37.5)
SMA male	Straight Plug	TC-195-SM	3190-1553	<1.25:1 (2.5)	Hex	Solder	Crimp	SS/G	1.0 (25.4)	0.32 (8.1)	0.015 (6.8)
TNC male	Straight Plug	TC-195-TM	3190-1554	<1.25:1 (2.5)	Knurl	Solder	Crimp	S/G	1.4 (35.6)	0.59 (15.0)	0.045 (20.4)

# \* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy \*\*VSWR spec based on 3 foot cable with a connector pair

Туре	Pa	art Number	Stock Code	Description
Crimp Tool	CT-24	40/200/195/100	3190-667	Crimp tool for LMR-100,195, 200 and 240 connectors
Cutting	Tool	CCT-01	3190-1544	Cable end flush cut tool
Deburr	Tool	DBT-U	3192-001	Removes center conductor rough edges
Replace Blade	ment	RB-01	3190-1609	Replacement blade for cutting tool

