



BNC Male Right Angle Connector Clamp/  
 Solder Attachment for RG174, RG316, RG188,  
 0.100 inch, PE-B100, PE-C100, LMR-100

## RF Connectors Technical Data Sheet

PE4307

### Configuration

- BNC Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 Interface Type
- Clamp/Solder Attachment

### Features

- Max. Operating Frequency 4 GHz
- Silver Plated Brass Contact
- Contact plating according to ASTM-B700

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4307 BNC male right angle connector with clamp/solder attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100 and LMR-100 is part of our full line of RF components available for same-day shipping. Our BNC male connector operates up to a maximum frequency of 4 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our BNC male right angle connector PE4307 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
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms

### Mechanical Specifications

Size	
Length	1.48 in [37.59 mm]
Width/Dia.	0.57 in [14.48 mm]
Height	1.03 in [26.16 mm]
Weight	0.068 lbs [30.84 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Right Angle Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 PE4307](#)



BNC Male Right Angle Connector Clamp/  
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## RF Connectors Technical Data Sheet

PE4307

### Material Specifications

Description	Material	Plating
Contact	Brass	Silver ASTM-B700
Insulation	PTFE	
Body	Brass	Nickel ASTM-B689
Coupling Nut	Brass	Nickel ASTM-B689

### Environmental Specifications

#### Temperature

Operating Range

-65 to +165 deg C

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

### Plotted and Other Data

Notes:

BNC Male Right Angle Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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 Male Right Angle Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 PE4307](#)

URL: <https://www.pasternack.com/bnc-male-standard-rg174-rg316-rg188-connector-pe4307-p.aspx>

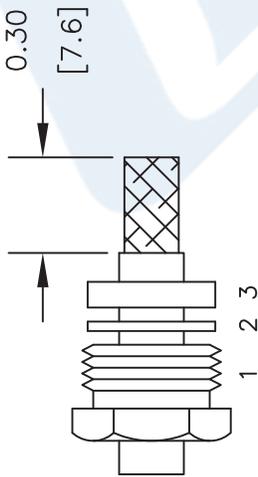
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# PE4307 CAD Drawing

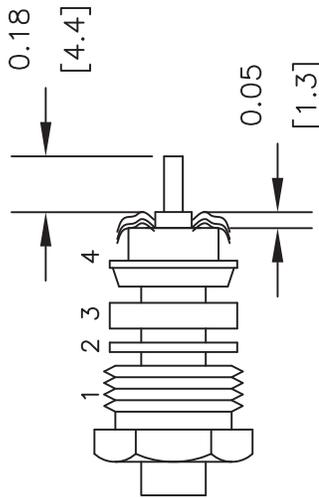
BNC Male Right Angle Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100

## ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TAPER END OF BRAID TO PERMIT ASSEMBLY OF BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.

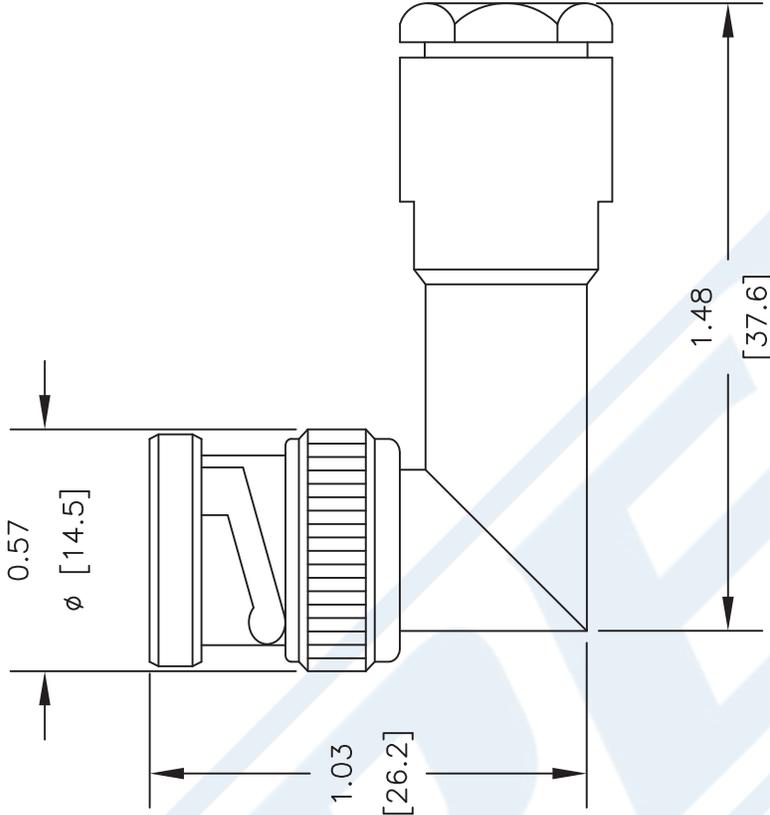


2. FORM BRAID OVER CLAMP NUT (4). TRIM BRAID BACK TO SHOULDER. CUT DIELECTRIC & CENTER CONDUCTOR TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR. SOLDER CONTACT TO CENTER CONDUCTOR. REMOVE EXCESS SOLDER. DO NOT OVER HEAT DIELECTRIC. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



## NOTE

INSERT PTFE BEFORE CONTACT. WITH OPEN END SLIDE OVER CENTER CONDUCTOR RESTING AGAINST DIELECTRIC.



DWG TITLE

**PE4307**

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].  
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

REV. -

FSCM NO. 53919

CAD FILE 050602

SCALE N/A

SIZE A

2233

**PE PASTERNAK**  
 THE ENGINEER'S RF SOURCE

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SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100

## RF Connectors Technical Data Sheet

**PE4200**

### Configuration

- SMB Plug Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100

### Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.41:1
- Gold Plated Beryllium Copper Contact
- 30 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4200 SMB plug connector with clamp/solder attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100 and LMR-100 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 1.41:1.

Our SMB plug connector PE4200 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			1.41:1	
Operating Voltage (AC)			750	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms

### Mechanical Specifications

Size	
Length	0.63 in [16 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: [SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 PE4200](#)



SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100

## RF Connectors Technical Data Sheet

**PE4200**

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 2.5 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:

SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 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: [SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 PE4200](#)

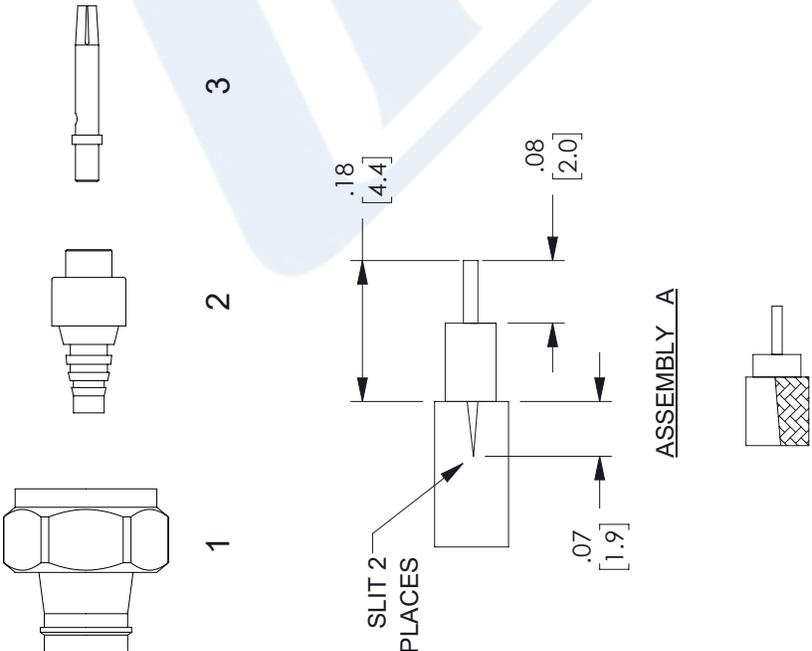
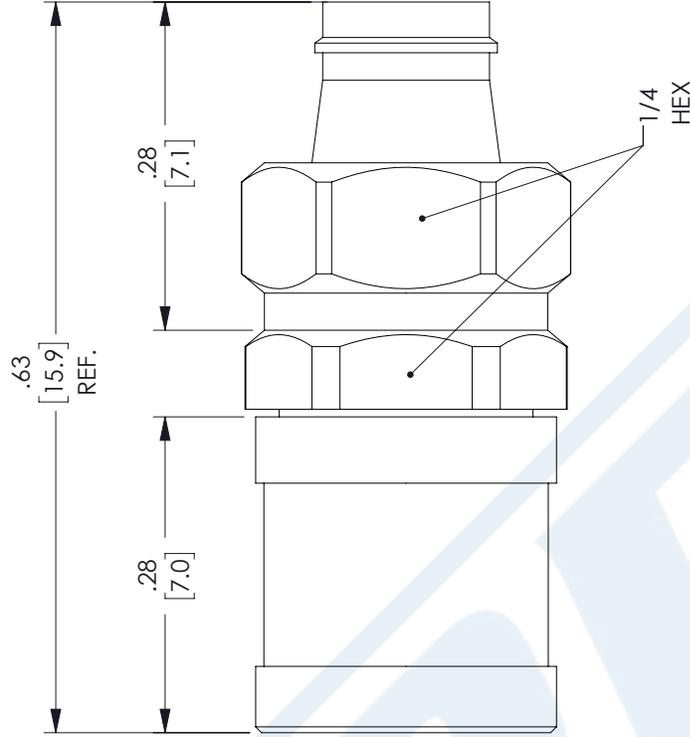
URL: <https://www.pasternack.com/smb-plug-standard-rg174-rg316-rg188-connector-pe4200-p.aspx>

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# PE4200 CAD Drawing

SMB Plug Connector Clamp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE4200 20220516	6/1/2022	SRAUTUS



## ASSEMBLY B STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT (1) OVER CABLE. STRIP CABLE AS SHOWN IN ASSEMBLY A. TIN CENTER CONDUCTOR. SLIT JACKET IN 2 PLACES & REMOVE ONE SIDE OF JACKET TO END OF SLIT AS SHOWN IN ASSEMBLY B. DO NOT NICK BRAID WHEN CUTTING ONE SIDE OF JACKET.
2. INSERT WEDGE ASSEMBLY (2) BETWEEN BRAID & DIELECTRIC. CENTER CONDUCTOR MUST ENTER HOLE IN INSULATOR.
3. INSERT CONTACT (3) IN INSULATOR & SOLDER CONTACT TO CENTER CONDUCTOR. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	TOLERANCES: .X = ±.2 [5.08] .XX = ±.02 [.51] .XXX = ±.005 [.13]	FRACTIONS ±.1/32 ANGLES ± 1°
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%L / -0	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

**PE PASTERNAK**  
an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

ITEM NO. PE4200  
CAGE CODE DMAY  
DRAWN BY 53919

REV B

# LMR<sup>®</sup>-100A Flexible Low Loss Communications Coax

## Ideal for...

- Drop-in Replacement for RG-316/RG-174 (uses standard connectors)
- 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

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

• **LMR<sup>®</sup>-PVC-W** is a white-jacketed version of LMR-PVC for marine and other indoor/outdoor applications where color compatibility is desired.

• **Flexibility** and bendability are hallmarks of the LMR-100A 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-100A. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

• **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-100A 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-100A 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-100A cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.



Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Solid BCCS	0.018	(0.46)
Dielectric	Solid PE	0.060	(1.52)
Outer Conductor	Aluminum Tape	0.065	(1.65)
Overall Braid	Tinned Copper	0.083	(2.11)
Jacket	(see table above)	0.110	(2.79)

Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	0.25	(6.4)
Bend Radius: repeated	in. (mm)	1	(25.4)
Bending Moment	ft-lb (N-m)	0.1	(0.014)
Weight	lb/ft (kg/m)	0.0092	(.014)
Tensile Strength	lb (kg)	15	(6.8)
Flat Plate Crush	lb/in. (kg/mm)	10	(0.18)

Environmental Specifications		
Performance Property	°F	°C
Installation Temperature Range	-40/+185	-40/+85
Storage Temperature Range	-94/+185	-70/+85
Operating Temperature Range	-40/+185	-40/+85

Electrical Specifications			
Performance Property	Units	US	(metric)
Velocity of Propagation	%	66	
Dielectric Constant	NA	2.30	
Time Delay	nS/ft (nS/m)	1.54	(5.05)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	30.8	(101.1)
Inductance	uH/ft (uH/m)	0.077	(0.25)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	81.0	(266)
Outer Conductor	ohms/1000ft (/km)	9.5	(31.2)
Voltage Withstand	Volts DC	500	
Jacket Spark	Volts RMS	2000	
Peak Power	kW	0.6	

Part Description				
Part Number	Application	Jacket	Color	Stock Code
LMR-100A-FR	Indoor/Outdoor Riser CMR	FRPE	Black	54037
LMR-100A-PVC	Indoor/Outdoor	PVC	Black	54119
LMR-100A-PVC-W	Indoor/Outdoor	PVC	White	54200

PVC = Poly Vinyl Chloride; MTO = Made to Order

**Attenuation vs. Frequency (typical)**



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
<b>Attenuation dB/100 ft</b>	3.9	5.1	8.9	10.9	15.8	22.8	30.1	33.2	35.2	39.8	64.1
<b>Attenuation dB/100 m</b>	12.9	16.7	29.4	35.8	51.9	74.9	98.7	109.0	115.5	130.6	210.3
<b>Avg. Power kW</b>	0.230	0.180	0.100	0.083	0.057	0.039	0.029	0.027	0.025	0.022	0.013

Calculate Attenuation =  $(0.709140) \cdot \sqrt{\text{FMHz}} + (0.001740) \cdot \text{FMHz}$  (interactive calculator available at <http://www.timesmicrowave/telecom>)  
 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 lb (g)
SMA male	Straight Plug	TC-100-SM	3190-1551	<1.25:1 (<3)	Hex	Solder	Crimp	SS/G	1.0 (25.4)	0.32 (8.1)	0.015 (6.8)
TNC male	Straight Plug	TC-100-TM	3190-1552	<1.25:1 (<3)	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



**Install Tools**

Type	Part Number	Stock Code	Description
Crimp Tool	CT-240/200/195/100	3190-667	Crimp tool for LMR-100, 195, 200 and 240 connectors
Cutting Tool	CCT-01	3190-1544	Cable end flush cut tool
Replacement Blade	RB-01	3190-1609	Replacement blade for cutting tool

