

CAPTERMACK

RF Connectors
Technical Data Sheet

PE45491

Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling

- LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 Interface Type
- Crimp/Solder Attachment
- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics

- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

Description

Pasternack's PE45491 SSMC plug connector with crimp/solder attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and RG316 is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.5:1.

Our SSMC plug connector PE45491 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 | | | 1.5:1 | |
| Insertion Loss | | | 0.3 | dB |
| Operating Voltage (AC) | | | 250 | Vrms |
| High Potential Voltage | | | 400 | Vrms |
| 5 MHz | | | | |
| Inner Conductor DC Resistance | | | 4 | mOhms |
| Outer Conductor DC Resistance | | | 1 | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |
| RF Leakage | -50 | | | dB |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 PE45491

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





RF Connectors
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PE45491

Mechanical Specifications

Size

 Length
 0.7 in [17.78 mm]

 Width/Dia.
 0.156 in [3.96 mm]

Mating Cycles 500 Cycles

Mating Torque 1.75 to 2 in-lbs [0.20 to 0.23 Nm]

Material Specifications

| Description | Material | Plating |
|--------------|------------------|---------------------|
| Contact | Beryllium Copper | Gold MIL-G-45204 |
| Insulation | Teflon | |
| Body | Beryllium Copper | Gold MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold MIL-G-45206 |
| Crimp Sleeve | Brass | Gold MIL-G-45204 |

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

Shock Method 213, Condition B, 75G @6ms @1/2 sine

Vibration Method 204, Condition D (20G)

Salt Spray Method 101, Condition B, 5% salt solution

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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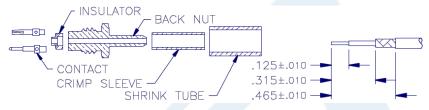


RF Connectors Technical Data Sheet

PE45491

Assembly Instruction

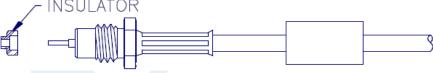
Assembly Instructions



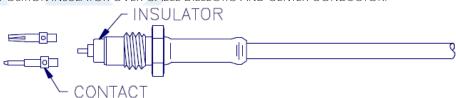
- 1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
- 2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
- 3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC



- 4. INSERT CABLE INTO TAIL-END OF BACK NUT, MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF NUT.
- 5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP.



6. POSITION INSULATOR OVER CABLE DIELECTIC AND CENTER CONDUCTOR.



- 7. SOLDER CONTACT TO CENTER CONDUCTOR.
- 8. INSERT CAABLE ASSEMBLY INTO BODY AND TIGHTEN NUT WITH A TORQUE WRENCH WITH A TORQUE OF 35-45 INCH-OUNCES.
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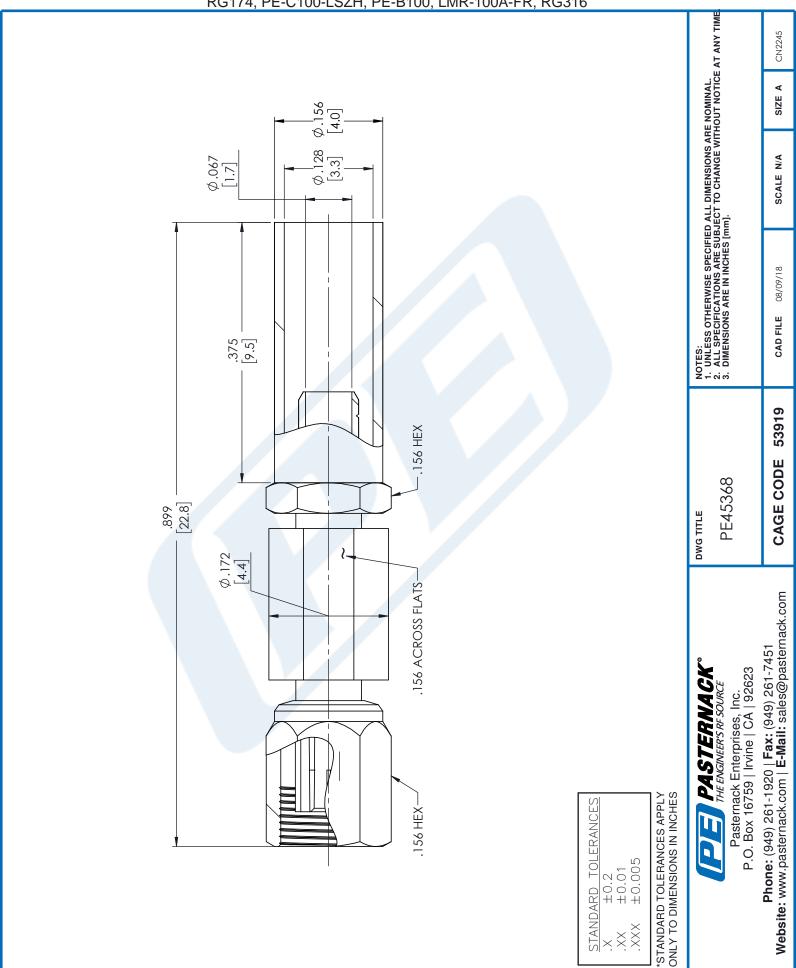
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URL: https://www.pasternack.com/ssmc-plug-lmr-100a-rg188-pe-c100-lszh-pe-b100-connector-pe45491-p.aspx

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PE45491 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316





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Environmental Specifications

Temperature

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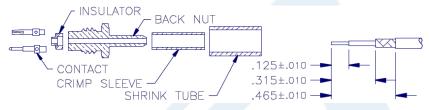


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Assembly Instruction

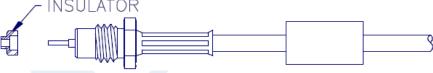
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- 1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
- 2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
- 3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC



- 4. INSERT CABLE INTO TAIL-END OF BACK NUT, MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF NUT.
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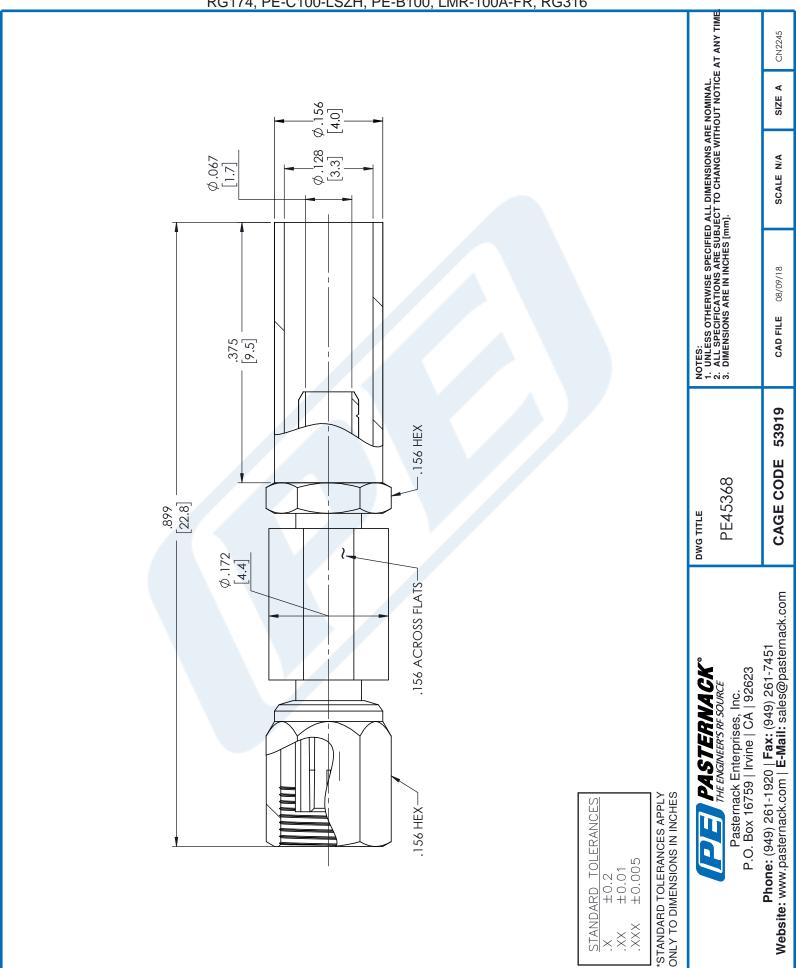
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URL: https://www.pasternack.com/ssmc-plug-lmr-100a-rg188-pe-c100-lszh-pe-b100-connector-pe45491-p.aspx

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PE45491 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316







Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

Configuration

- Flexible Cable
- 1 Shield(s)

Features

- · High Flexibility
- FEP Jacket

Applications

- · General Purpose
- Antenna Feeds
- · Communication Systems
- Wireless Systems
- Indoor / Outdoor Uses
- High Temperature Applications

• Velocity of Propagation 69%

- High Flexibility Applications
- Jumper Cable Assemblies

Description

Flexible coaxial cable are ideal for applications where tight bends and continual flexure are required. Pasternack's RG316/U is a single shielded flexible coax cable with FEP jacket and compatible with a wide selection of connector types. This RG316/U coaxial cable has a stranded inner conductor for better flexibility and operates up to 3 GHz. The FEP jacket of this RG316/U coax cable makes it suitable for indoor/outdoor uses and high temperature applications. RG316/U datasheet specifications and outline drawing for this flexible cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|-------------|--------|
| Frequency Range | DC | | 3 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 69 | | % |
| Operating Voltage (AC) | | | 900 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 2,000 | Vrms |
| Jacket Spark | | | 2,000 | Vrms |
| Nominal Capacitance | | | 32 [104.99] | [pF/m] |
| | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U

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Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|------------------|-------|-------|------|--------|--------|----------|
| Frequency | 0.05 | 0.1 | 0.4 | 1 | 3 | GHz |
| Attenuation, Typ | 7.5 | 11 | 21 | 38 | 58 | dB/100ft |
| | 24.61 | 36.09 | 68.9 | 124.67 | 190.29 | dB/100m |

Mechanical Specifications

Diameter Weight 0.102 in [2.59 mm] 0.01 lbs/ft [0.01 Kg/m]

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|--------------------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, Silver7 | 0.02 in 0.51 mm |
| Conductor Type | Stranded | |
| Dielectric | PTFE | 0.06 in 1.52 mm |
| First Shield | Silver Plated Copper Braid 95% coverage | 0.081 in 2.06 mm |
| Jacket | FEP, Tan | 0.102 in [2.59 mm] |

Environmental Specifications

Temperature

Operating Range

-55 to +200 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U





Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket 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.

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URL: https://www.pasternack.com/flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-rg316-u-p.aspx

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RG316/U CAD Drawing

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