

RF Connectors Technical Data Sheet

PE44491

Configuration

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms

Features

- Max. Operating Frequency 65 GHz
- Good VSWR of 1.68:1

Applications

General Purpose Test

- Straight Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type • Solder Attachment
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Description

Pasternack's PE44491 Mini SMP female connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our Mini SMP female connector operates up to a maximum frequency of 65 GHz and offers good VSWR of 1.68:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Custom Cable Assemblies

Our Mini SMP female connector PE44491 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 | | 65 | GHz |
| VSWR | | | 1.68:1 | |
| Operating Voltage (AC) | | | 325 | Vrms |
| Inner Conductor DC Resistance | | | 6 | mOhms |
| Outer Conductor DC Resistance | | | 2 | mOhms |
| Insulation Resistance | 5,000 | | | MOhms |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------|----------|----------|----------|----|----|-------|
| Frequency Range | DC to 18 | 18 to 40 | 40 to 65 | | | GHz |
| VSWR, Max | 1.11:1 | 1.33:1 | 1.68:1 | | | |
| | | | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Mini SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44491

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





RF Connectors Technical Data Sheet

PE44491

Electrical Specification Notes: Insertion loss = 0.04 x sqrt(fGHz) dB max up to 26.5 GHz.

Mechanical Specifications

| Weight | 0.13 in [3.30 hin] 0.006 lbs [2.72 g] |
|-------------------------------------|--|
| Size Length Width/Dia. | 0.26 in [6.6 mm] 0.13 in [3.30 mm] |

| Description | Material | Plating | |
|-------------|------------------|---------|--|
| Contact | Beryllium Copper | Gold | |
| Insulation | PTFE | | |
| Body | Beryllium Copper | Gold | |

Mechanical Specification Notes: Mating cycles: 500 (smooth bore), 100 (full detent) minimum.

Environmental Specifications

Temperature Operating Range Humidity Shock Vibration Thermal Shock

-55 to +155 deg C MIL-STD-202, Method 106 MIL-STD-202, Method 213, Condition A MIL-STD-202, Method 204, Condition A MIL-STD-202, Method 107, Condition B

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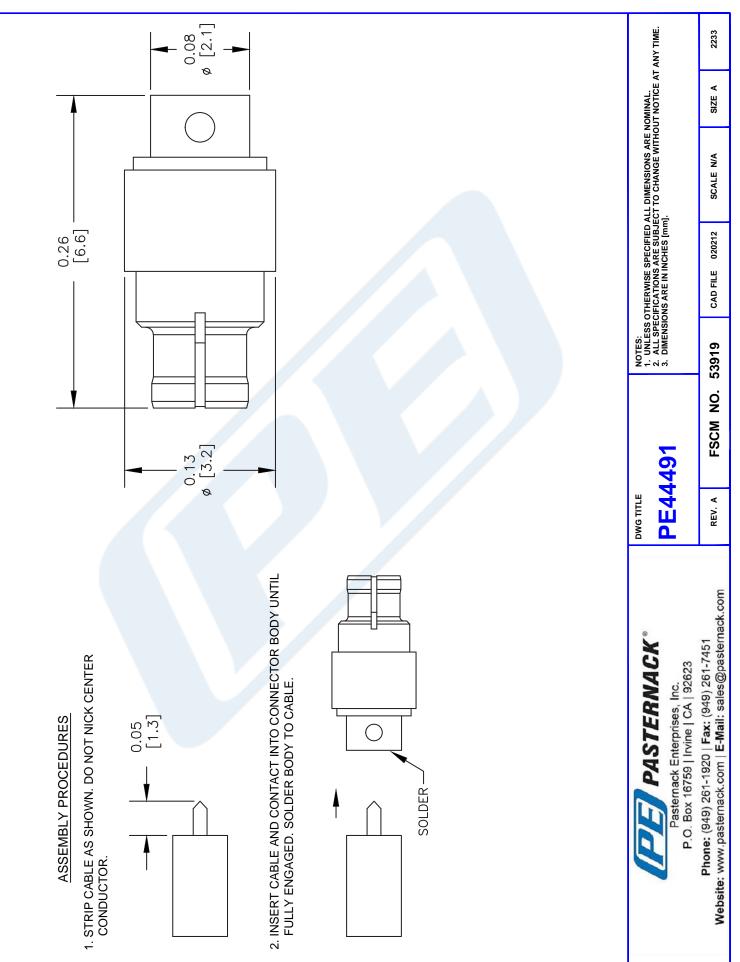
URL: https://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44491-p.aspx

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PE44491 CAD Drawing

Mini SMP Female Connector Solder Attachment for PE-

047SR, PE-SR047AL, PE-SR047FL





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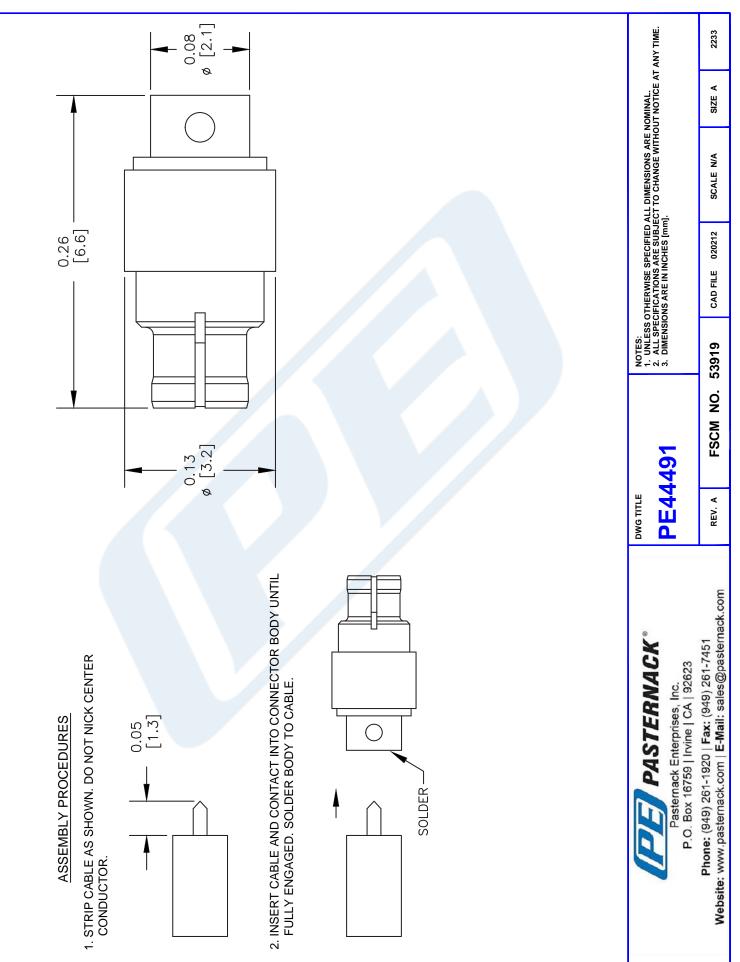
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PE44491 CAD Drawing

Mini SMP Female Connector Solder Attachment for PE-

047SR, PE-SR047AL, PE-SR047FL





Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet



PE-SR047FL

Configuration

- Formable Cable
- 1 Shield(s)

Features

- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- May be formed by hand and does not require special tools to bend

Applications

- Test and Measurement
- Communication Systems
- Wireless Systems
- Medical Equipment
- May be formed more than once without damaging the outer conductor
 Time d Compare Provid Outer Conductor
- Tinned Copper Braid Outer Conductor
- Max Frequency 20 GHz
 - RADAR
 - Low Loss Applications

Description

Formable semi-rigid coaxial cable is a hand formable version of standard semi-rigid that does not require complicated and costly preformed cable assemblies. Because the dimensions and electrical characteristics are so closely matched to semi-rigid coax, standard semi-rigid connectors can be used. Pasternack's PE-SR047FL is a formable .047 semi-rigid coax cable with tinned copper braid outer conductor, providing low loss and excellent RF shielding effectiveness. This semi-flexible cable has an FEP jacket to reduce the chance of shorting exposed contacts or circuit conductors. Pasternack's formable cable can be used as an alternative to semi-rigid coaxial cable in applications where flexibility is required without giving up high electrical performance level. PE-SR047FL datasheet specifications and outline drawing for this .047 semi-flexible hand formable 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 | | 20 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 69.5 | | % |
| Inner Conductor DC Resistance | | | 207 | Ohms/1000ft |
| Outer Conductor DC Resistance | | | 8 | Ohms/1000ft |
| Nominal Capacitance | | 32 [104.99] | | pF/ft [pF/m] |
| | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL

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Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|------------------|-------|--------|--------|--------|--------|----------|
| Frequency | 0.5 | 1 | 3 | 5 | 10 | GHz |
| Attenuation, Typ | 25 | 36 | 65 | 86 | 128 | dB/100ft |
| | 82.02 | 118.11 | 213.25 | 282.15 | 419.95 | dB/100m |
| Description | F6 | F7 | F8 | F9 | F10 | Units |
| Frequency | 15 | 20 | | | | GHz |
| Attenuation, Typ | 162 | 192 | | | | dB/100ft |
| | 531.5 | 629.92 | | | | dB/100m |
| | | | | | | |

Mechanical Specifications

| Description | Material and Plating | Diameter |
|-----------------|----------------------------|------------------|
| nner Conductor | Copper Clad Steel, Silver1 | 0.011 in 0.28 mm |
| Conductor Type | Solid | |
| lielectric | PTFE | 0.034 in 0.86 mm |
| Outer Conductor | Tinned Copper Braid | 0.047 in 1.19 mm |

Environmental Specifications

Temperature Operating Range

-40 to +100 deg C

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URL: https://www.pasternack.com/formable-0.047-semirigid-replacement-50-ohm-coax-cable-tinned-braid-pe-sr047fl-p.aspx

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PE-SR047FL CAD Drawing

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