

SMC Jack to SMC Plug Cable Using RG316-DS Coax



PE3W12088

Configuration

- Connector 1: SMC Jack
- Connector 2: SMC Plug
- Cable Type: RG316-DS
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 85 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12088 SMC jack to SMC plug cable using RG316-DS coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMC to SMC cable assembly has a jack to plug gender configuration with 50 ohm flexible RG316-DS coax. The PE3W12088 SMC jack to SMC plug cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 85 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|---------------|---------|-----------------------|
| Frequency Range | DC | | 3 | GHz |
| VSWR | | | 1.5:1 | |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | 85 | | | dB |
| Capacitance | | 28.96 [95.01] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 83.82 [275] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 5.33 [17.49] | | Ohms/1000ft [Ohms/Km] |
| Operating Voltage (AC) | | | 335 | Vrms |

Specifications by Frequency

SMC Jack to SMC Plug Cable Using RG316-DS Coax



PE3W12088

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|------|------|------|------|-------|-------|--------------|
| | | Frequency | 100 | 250 | 500 | 1000 | 3000 | MHz | |
| PE3W12088 | Custom Lengths Available | Insertion Loss (Typ.) | 0.08 | 0.13 | 0.19 | 0.29 | 0.536 | dB/ft | |
| | | | 0.28 | 0.43 | 0.64 | 0.96 | 1.76 | dB/m | |
| PE3W12088-6 | 6 inch | Insertion Loss (Typ.) | 0.25 | 0.27 | 0.3 | 0.35 | 0.47 | dB | 0.017 |
| PE3W12088-12 | 12 inch | Insertion Loss (Typ.) | 0.29 | 0.33 | 0.4 | 0.49 | 0.74 | dB | 0.024 |
| PE3W12088-24 | 24 inch | Insertion Loss (Typ.) | 0.37 | 0.46 | 0.59 | 0.78 | 1.28 | dB | 0.039 |
| PE3W12088-36 | 36 inch | Insertion Loss (Typ.) | 0.45 | 0.59 | 0.79 | 1.07 | 1.81 | dB | 0.053 |
| PE3W12088-48 | 48 inch | Insertion Loss (Typ.) | 0.54 | 0.72 | 0.98 | 1.36 | 2.35 | dB | 0.067 |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

| | |
|-----------------------------|----------------|
| Loss due to Connector 1: | 0.1 dB |
| Loss due to Connector 2: | 0.1 dB |
| Base Weight: | 0.024 pounds |
| Additional Weight per Inch: | 0.00117 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.024 lbs [10.89 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | RG316-DS |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Braid |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | FEP, Tan |
| Jacket Diameter | 0.114 in [2.9 mm] |
| One Time Minimum Bend Radius | 0.59 in [14.99 mm] |
| Repeated Minimum Bend Radius | 1.57 in [39.88 mm] |

SMC Jack to SMC Plug Cable Using RG316-DS Coax



PE3W12088

Connectors

| Description | Connector 1 | Connector 2 |
|-------------------------------|------------------|------------------------|
| Type | SMC Jack | SMC Plug |
| Specification | MIL-C-39012 | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Brass, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 30μ in. minimum | 30μ in. minimum |
| Dielectric Type | Teflon | Teflon |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100μ in. minimum | 100μ in. minimum |
| Hex Size | | 1/4 in |

Environmental Specifications

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

Plotted and Other Data

Notes:

SMC Jack to SMC Plug Cable Using RG316-DS Coax



PE3W12088

Typical Performance Data

How to Order

Part Number Configuration:

PE3W12088

- XX

uu

- Unit of Measure:
cm = Centimeters
<blank> = Inches

- Length

- Base Number

Example: PE3W12088-12 = 12 inches long cable
PE3W12088-100cm = 100 cm long cable

SMC Jack to SMC Plug Cable Using RG316-DS 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: [SMC Jack to SMC Plug Cable Using RG316-DS Coax PE3W12088](#)

URL: <https://www.pasternack.com/smc-jack-to-smc-plug-cable-using-rg316-ds-pe3w12088-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W12088 CAD Drawing
SMC Jack to SMC Plug Cable Using RG316-DS Coax

