



## SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax

### RF Cable Assemblies Technical Data Sheet

PE3W04458-12

#### Configuration

- Connector 1: SMA Male
- Connector 2: SSMC Jack
- Cable Type: RG316-DS

#### Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

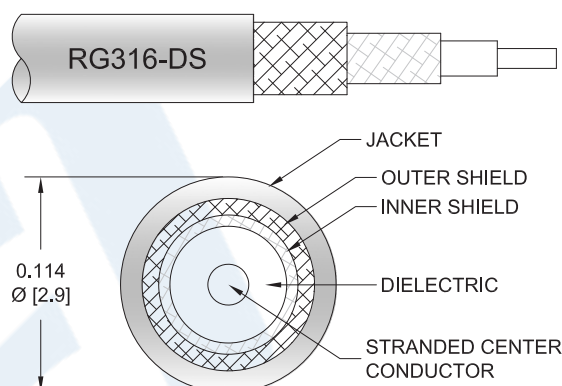
#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W04458-12 SMA male to SSMC jack 12 inch 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 SMA to SSMC cable assembly has a male to jack gender configuration with 50 ohm flexible RG316-DS coax. The PE3W04458-12 SMA male to SSMC jack cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax PE3W04458-12](#)



## SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax

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#### Electrical Specifications

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 3       | GHz          |
| VSWR                    |         |              | 1.5:1   |              |
| Velocity of Propagation |         | 70           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |              | 250     | Vrms         |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 3    | GHz   |
| Insertion Loss (Max.) | 0.33 | 0.38 | 0.47 | 0.62 | 0.67 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax use in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector Loss

#### Mechanical Specifications

##### Cable Assembly

|          |                  |
|----------|------------------|
| Length*  | 12 in [304.8 mm] |
| Diameter | 0.315 in [8 mm]  |

##### 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]          |
| Repeated Minimum Bend Radius         | 0.6 in [15.24 mm]          |

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## SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax

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#### Connectors

| Description                           | Connector 1        | Connector 2            |
|---------------------------------------|--------------------|------------------------|
| Type                                  | SMA Male           | SSMC Jack              |
| Specification                         | MIL-STD-348A       |                        |
| Impedance                             | 50 Ohms            | 50 Ohms                |
| Mating Cycles                         |                    | 500                    |
| Contact Material and Plating          | Brass, Gold        | Beryllium Copper, Gold |
| Contact Plating Specification         | 30 µin minimum     | MIL-G-45204            |
| Dielectric Type                       | PTFE               | Teflon                 |
| Outer Conductor Material and Plating  |                    | Beryllium Copper, Gold |
| Outer Conductor Plating Specification |                    | MIL-G-45204            |
| Body Material and Plating             | Brass, Nickel      | Beryllium Copper, Gold |
| Body Plating Specification            | 100 µin minimum    | MIL-G-45204            |
| Coupling Nut Material and Plating     | Brass, Nickel      |                        |
| Coupling Nut Plating Specification    | 100 µin minimum    |                        |
| Hex Size                              | 5/16 inch          |                        |
| Torque                                | 3 in-lbs [0.34 Nm] | 1.75 in-lbs [0.2 Nm]   |

#### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +165 deg C

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

#### Plotted and Other Data

Notes:

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## SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax

### RF Cable Assemblies Technical Data Sheet

PE3W04458-12

#### How to Order

Part Number Configuration:

**PE3W04458**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3W04458-12 = 12 inches long cable  
PE3W04458-100cm = 100 cm long cable

SMA Male to SSMC Jack Cable 12 Inch Length 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.

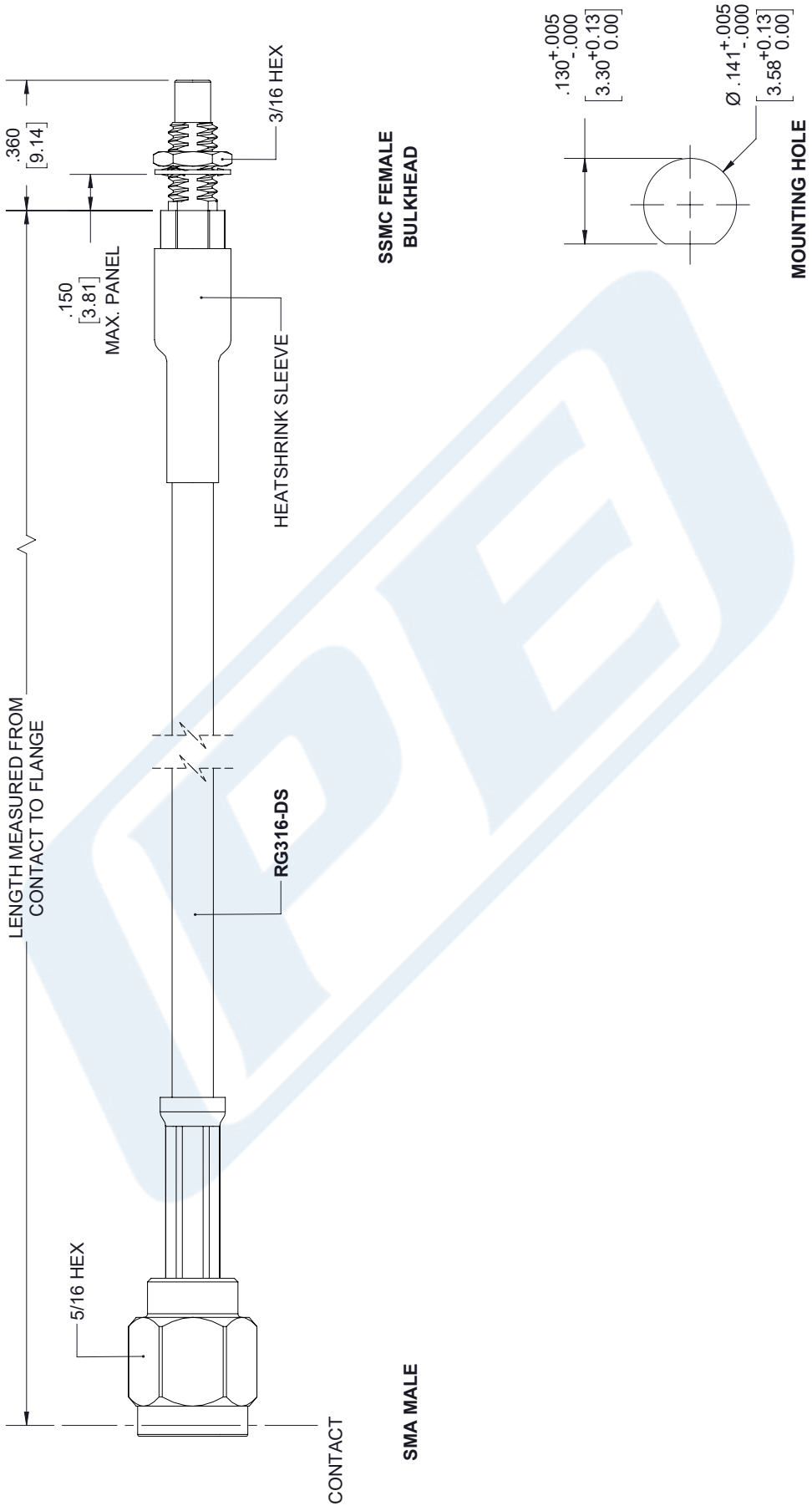
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax PE3W04458-12](https://www.pasternack.com/sma-male-ssmc-jack-rg316-ds-cable-assembly-pe3w04458-12-p.aspx)

URL: <https://www.pasternack.com/sma-male-ssmc-jack-rg316-ds-cable-assembly-pe3w04458-12-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.

PE3W04458-12 CAD Drawing  
SMA Male to SSMC Jack Cable 12 Inch Length Using RG316-DS Coax

| REVISIONS |               |          |          |
|-----------|---------------|----------|----------|
| REV.      | DESCRIPTION   | DATE     | APPROVED |
| B         | PCR PE3W04458 | 10/22/19 | S.ELLIS  |



|                                                                                                  |             |
|--------------------------------------------------------------------------------------------------|-------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |             |
| TOLERANCES:                                                                                      | FRACTIONS   |
| X±.2 [5.08]                                                                                      | ±.132       |
| .XX±.01 [.25]                                                                                    | ±.13        |
| .XXX±.005 [.13]                                                                                  | ANGLES ± 1° |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.                                                  |             |
| THIRD-ANGLE PROJECTION                                                                           |             |

|                                                                                                                                                                                         |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>PE PASTERNAK</b><br>an INFINITI brand                                                                                                                                                |             |
| Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>www.pasternack.com   e-mail: sales@pasternack.com |             |
| SIZE                                                                                                                                                                                    | PART NUMBER |
| A                                                                                                                                                                                       | PE3W04458   |
| CAGE                                                                                                                                                                                    | DRAWN BY    |
| 53919                                                                                                                                                                                   | K.DANG      |
| SCALE                                                                                                                                                                                   | REV         |
| N/A                                                                                                                                                                                     | B           |

|                                                                                                                        |    |
|------------------------------------------------------------------------------------------------------------------------|----|
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