



## SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink

### RF Cable Assemblies Technical Data Sheet

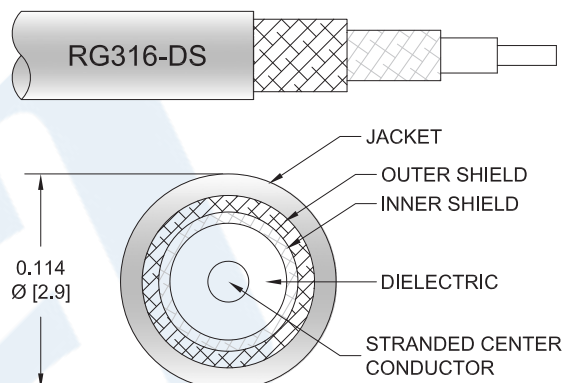
PE3W04944/HS-200CM

#### Configuration

- Connector 1: SMB Plug
- Connector 2: MMCX Plug
- Cable Type: RG316-DS

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W04944/HS-200CM SMB plug to MMCX plug 200 cm 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 SMB to MMCX cable assembly has a plug to plug gender configuration with 50 ohm flexible RG316-DS coax. The PE3W04944/HS-200CM SMB plug to MMCX plug 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.

#### Electrical Specifications

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 3       | GHz          |
| VSWR                    |         |              | 1.45:1  |              |
| Velocity of Propagation |         | 70           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |              | 250     | Vrms         |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink PE3W04944/HS-200CM](#)



## SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink

### RF Cable Assemblies Technical Data Sheet

PE3W04944/HS-200CM

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 3    | GHz   |
| Insertion Loss (Max.) | 0.86 | 1.08 | 1.52 | 2.83 | 3.27 | 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*  | 78.74 in [200 cm] |
| Diameter | 0.256 in [6.5 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] |
|------------------------------|-------------------|

#### Connectors

| Description                   | Connector 1            | Connector 2     |
|-------------------------------|------------------------|-----------------|
| Type                          | SMB Plug               | MMCX Plug       |
| Specification                 | MIL-STD-348A           |                 |
| Impedance                     | 50 Ohms                | 50 Ohms         |
| Contact Material and Plating  | Beryllium Copper, Gold | Brass, Gold     |
| Contact Plating Specification | 30µ in. minimum        | 30µ in. minimum |
| Dielectric Type               | Teflon                 | Teflon          |
| Body Material and Plating     | Brass, Nickel          | Brass, Gold     |
| Body Plating Specification    | 100µ in. minimum       | 3µ in. minimum  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink PE3W04944/HS-200CM](#)



## SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink

### RF Cable Assemblies Technical Data Sheet

PE3W04944/HS-200CM

#### 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 +155 deg C

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

#### Plotted and Other Data

Notes:

#### How to Order

Part Number Configuration:

**PE3W04944/HS - xx uu**

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

Example: PE3W04944/HS-12 = 12 inches long cable  
PE3W04944/HS-100cm = 100 cm long cable

SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink 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 to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink PE3W04944/HS-200CM](#)

URL: <https://www.pasternack.com/smb-plug-mmcx-plug-rg316-ds-cable-assembly-pe3w04944-hs-200cm-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.

PE3W04944/HS-200CM CAD Drawing  
SMB Plug to MMCX Plug Cable 200 cm Length Using RG316-DS Coax with HeatShrink

| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 04/23/19 | SELLIS   |



|                                                                                                  |             |
|--------------------------------------------------------------------------------------------------|-------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |             |
| TOLERANCES:                                                                                      | FRACTIONS   |
| X±.2 [5.08]                                                                                      | ±.132       |
| .XX±.01 [.25]                                                                                    | ±.132       |
| .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                                                                                                                                                                                    | CAGE         |
| A                                                                                                                                                                                       | 53919        |
| DRAWN BY                                                                                                                                                                                | K.DANG       |
| PART NUMBER                                                                                                                                                                             | PE3W04944/HS |
| REV                                                                                                                                                                                     | A            |

|                                                                                                                        |        |
|------------------------------------------------------------------------------------------------------------------------|--------|
| THE INFORMATION AND<br>DESIGN IN THIS DOCUMENT<br>IS THE PROPERTY OF<br>PASTERNAK CORPORATION.<br>ALL RIGHTS RESERVED. |        |
| SHEET                                                                                                                  | 1 OF 1 |
| SCALE                                                                                                                  | N/A    |

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT  
ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.