



## SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax

### RF Cable Assemblies Technical Data Sheet

PE3C4389-18

#### Configuration

- Connector 1: SSMC Plug
- Connector 2: SSMC Jack Bulkhead
- Cable Type: RG178

#### Features

- SSMC Cable Assembly Max. Operating Frequency of 3 GHz
- Small SSMC cable connection form factor (50% smaller than SMA, radially)
- Reliable threaded coupling
- In stock and ready to ship

#### Applications

- SSMC Cable General Purpose Test
- Data Acquisition Systems
- A/D Conversion Systems
- Ultra Wideband Digital Receivers
- Software defined radio (SDR)

#### Description

Pasternack's SSMC cable assemblies are part of our full line of RF components available for same-day shipping. These SSMC cable assemblies are designed to connect SSMC system components and test connections, delivering signal frequencies as high as 12.4 GHz. Our family of SSMC cables can also be used to connect SSMC ports on data acquisition systems, A/D modules or SSMC coax patch panels. If none of our standard options fit your application, you can specify your own custom SSMC cable assembly using Pasternack's online Cable Creator.

Our SSMC cable assembly datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave cable assemblies allow designers to configure and customize their signal connections however they like. Whether the need is to provide SSMC cabling for a data acquisition system, or simply create a custom cable assembly configuration, Pasternack has the right cable assemblies 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      |              | 3       | GHz          |
| VSWR                    |         |              | 1.44:1  |              |
| 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: [SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax PE3C4389-18](#)



# SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax

## RF Cable Assemblies Technical Data Sheet

PE3C4389-18

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5 | Units |
|-----------------------|------|------|------|------|----|-------|
| Frequency             | 0.1  | 0.4  | 1    | 3    |    | GHz   |
| Insertion Loss (Typ.) | 0.41 | 0.62 | 0.87 | 1.38 |    | dB    |

### Mechanical Specifications

#### Cable Assembly

|          |                    |
|----------|--------------------|
| Length*  | 18 in [457.2 mm]   |
| Diameter | 0.156 in [3.96 mm] |

#### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | RG178                      |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Stranded                   |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 1                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.072 in [1.83 mm]         |
| Repeated Minimum Bend Radius         | 0.4 in [10.16 mm]          |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax PE3C4389-18](#)



SSMC Plug to SSMC Jack Bulkhead Cable  
18 Inch Length Using RG178 Coax

RF Cable Assemblies Technical Data Sheet

PE3C4389-18

**Connectors**

| Description                           | Connector 1            | Connector 2            |
|---------------------------------------|------------------------|------------------------|
| Type                                  | SSMC Plug              | SSMC Jack Bulkhead     |
| Impedance                             | 50 Ohms                | 50 Ohms                |
| Mating Cycles                         | 500                    | 500                    |
| Contact Material and Plating          | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification         | MIL-G-45204            | MIL-G-45204            |
| Dielectric Type                       | Teflon                 | Teflon                 |
| Outer Conductor Material and Plating  |                        | Beryllium Copper, Gold |
| Outer Conductor Plating Specification |                        | MIL-G-45204            |
| Body Material and Plating             | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Specification            | MIL-G-45204            | MIL-G-45204            |
| Coupling Nut Material and Plating     | Beryllium Copper, Gold |                        |
| Coupling Nut Plating Specification    | MIL-G-45205            |                        |
| Torque                                | 1.75 in-lbs [0.2 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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax PE3C4389-18](#)



## SSMC Plug to SSMC Jack Bulkhead Cable 18 Inch Length Using RG178 Coax



**\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES**

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623

**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** [www.pasternack.com](http://www.pasternack.com) | **E-Mail:** [sales@pasternack.com](mailto:sales@pasternack.com)

**DWG TITLE**

PE3C4389

CAGE CODE 53919

NOTES:

- NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
  3. DIMENSIONS ARE IN INCHES [mm].

**CAD FILE** 08/31/17

SCALE N/A

**SIZE A**

CN2245