

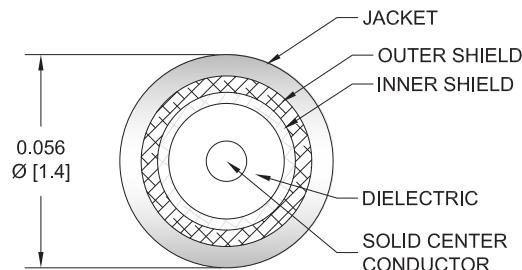
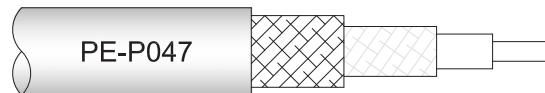
SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder



PE3M0418

Configuration

- Connector 1: Push-on SMPS Socket
- Connector 2: Push-on SMPS Socket
- Cable Type: PE-P047
- Coax Flex Type: Flexible



Features

- Max Frequency: 50 GHz
- Can be installed in all D38999 size 16 inserts
- Lot traceability
- High speed RF cable assembly

Applications

- Military and Aerospace
- Avionics
- Industrial Automation

Description

The PE3M0418 from Pasternack is a D38999 cable assembly that is built with a size 16 SMPS Socket contact on one end and a SMPS Socket connector on the other. Pasternack MIL-DTL-38999 (also known as D38999 or 38999) coaxial cable assembly products are used in applications requiring high quality such as laboratory RF test and measurement, rugged and designed for defense/military, production environments, general use, etc. This SMPS to SMPS cable assembly is a part of one of the largest selections of same-day ship coaxial cables for RF, microwave, and millimeter wave interconnect solutions. This high frequency D38999 cable assembly operates at a maximum frequency of 50 GHz.

The PE3M0418 RF cable has a FEP jacket of 0.056-inch diameter. This radio frequency cable assembly can withstand temperatures ranging from -65 to 125 degrees C. Our SMPS Socket to SMPS Socket cable has a maximum VSWR of 1.4:1. This flexible RF cable assembly with a 0.5-inch diameter has copper as the cable's inner conducting material and FEP dielectric type. The PE3M0418 in-series RF cable has 90 dB of minimum RF shielding.

SMPS Socket to SMPS Socket cable assembly is built with PE-P047, which is a flexible coax type. The Pasternack PE3M0418 flexible cable assembly has a 50 Ohm impedance and is double shielded. Additional dimensions, specifications, and CAD drawings for this SMPS to SMPS RF cables are available on our downloadable PDF datasheet.

SMPS Socket to SMPS Socket cable assembly is just one of more than one million in-stock RF products available. Pasternack is where to buy high quality custom RF cable assembly products for rugged and MIL-STD designed military/defense, aerospace, outdoor and harsh environment, microwave and millimeter wave radio transmitter receiver, component inter-connection and more for RF test & measurement labs, telecom, phase stable, phase and delay matching, and other radio frequency applications can be manufactured. Variations of SMPS cable assemblies can also be built and will ship on the same day as well, search this website or contact us for assistance. For further information on similar products, our expert technical support and trained sales team can get you the ideal SMPS to SMPS RF cable assembly as per your requirements.

SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder



PE3M0418

Referenced Specifications

| | |
|----------------|---|
| IPC J-STD-001 | Requirements for Soldered Electrical and Electronic Assemblies |
| IPC J-STD-006 | Requirements for Electronic Grade Solder Alloys and Fluxed and Non-Fluxed Solid Solders for Electronic Soldering Applications |
| IPC/WHMA-A-620 | Requirements and Acceptance for Cable and Wire Harness Assemblies |
| MIL-DTL-17 | Cables, Radio Frequency, Flexible and Semirigid, General Specification for |
| MIL-PRF-39012 | Connectors, Coaxial, Radio Frequency, General Specification for |
| MIL-STD-348 | Radio Frequency Connector Interfaces for MIL-DTL-3643, MIL-DTL-3650, MIL-DTL-3655, MIL-DTL-25516, MIL-PRF-31031, MIL-PRF-39012, MIL-PRF-49142, MIL-PRF-55339, MIL-DTL-83517 |
| SAE AS22520 | Crimping Tools, Wire Termination, General Specification For |
| SAE AS23053 | Insulation Sleeving, Electrical, Heat Shrinkable, General Specifications For |
| SAE AS5942 | Marking of Electrical Insulating Materials |
| IPC J-STD-001 | Requirements for Soldered Electrical and Electronic Assemblies |

Material Specifications

| Component | Specification |
|---------------|---|
| Cable | PE-P047 in accordance with PE-P047 datasheet |
| Connector 1 | in accordance with MIL-DTL-38999 |
| Connector 2 | in accordance with MIL-DTL-38999 |
| Heat Shrink 1 | M23053/5-103-0 in accordance with SAE AS23053 |
| Heat Shrink 2 | M23053/5-103-0 in accordance with SAE AS23053 |
| Solder | SAC305 in accordance with J-STD-006 |

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range | DC | | 50 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 90 | | | dB |
| Capacitance | | 29 [95.14] | | pF/ft [pF/m] |

Specifications by Frequency

SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder



PE3M0418

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|------|------|-------|-------|-------|-------|--------------|
| | | Frequency | 2500 | 5000 | ##### | ##### | 50000 | MHz | |
| PE3M0418 | Custom Lengths Available | Insertion Loss (Typ.) | 0.54 | 0.79 | 1.17 | 1.75 | 3.087 | dB/ft | |
| | | | 1.77 | 2.59 | 3.84 | 5.76 | 10.13 | dB/m | |
| PE3M0418-6 | 6 inch | Insertion Loss (Typ.) | 0.47 | 0.6 | 0.79 | 1.08 | 1.75 | dB | 0.0215 |
| PE3M0418-12 | 12 inch | Insertion Loss (Typ.) | 0.74 | 0.99 | 1.37 | 1.96 | 3.29 | dB | 0.023 |
| PE3M0418-24 | 24 inch | Insertion Loss (Typ.) | 1.28 | 1.78 | 2.54 | 3.71 | 6.38 | dB | 0.026 |
| PE3M0418-36 | 36 inch | Insertion Loss (Typ.) | 1.82 | 2.57 | 3.71 | 5.47 | 9.47 | dB | 0.029 |
| PE3M0418-48 | 48 inch | Insertion Loss (Typ.) | 2.35 | 3.35 | 4.88 | 7.22 | 12.55 | dB | 0.032 |
| PE3M0418-60 | 60 inch | Insertion Loss (Typ.) | 2.89 | 4.14 | 6.05 | 8.97 | 15.64 | dB | 0.035 |

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: 0.023 pounds

Additional Weight per Foot: 0.003 pounds

Electrical Specification Notes:

Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

| Description | Minimum | Typical | Maximum | Units |
|----------------------|---------|---------------|---------|---------|
| Length* | | | 0 [0] | in [mm] |
| Cable Outer Diameter | | 0.056 | | in |
| Weight | | 0.023 [10.43] | | lbs [g] |

Cable Characteristics

| Description | Specification |
|--------------------------------------|----------------------------|
| Cable Type | PE-P047 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | FEP |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Tape |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | FEP |

SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder



PE3M0418

Connector Characteristics

| Description | Connector 1 | Connector 2 |
|--------------------------------------|-----------------------------|-----------------------------|
| Type | SMPS Socket | SMPS Socket |
| Specification | MIL-DTL-38999 | MIL-DTL-38999 |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Connection Method | Push-on | Push-on |
| Contact Size | 16 | 16 |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Material and Plating | Stainless Steel, Passivated | Stainless Steel, Passivated |

Mechanical Specification Notes:

Environmental Specifications

| Description | Specification |
|-----------------------------|-------------------|
| Temperature Operating Range | -65 to +125 deg C |

Compliance Certifications

(see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.

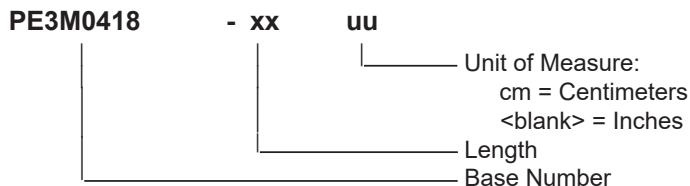
SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder



PE3M0418

How to Order

Part Number Configuration:



Example: PE3M0418-12 = 12 inches long cable
 PE3M0418-100cm = 100 cm long cable

Cable Assembly Length Tolerances:

| Imperial English | | Metric | |
|---------------------|-----------------|---------------------|------------------|
| "L" ≤ 1 ft | +0.5 in / -0 in | "L" ≤ 0.3 m | +12.5 mm / -0 mm |
| 1 ft < "L" ≤ 5 ft | +1 in / -0 in | 0.3 m < "L" ≤ 1.5 m | +25 mm / -0 mm |
| 5 ft < "L" ≤ 10 ft | +2 in / -0 in | 1.5 m < "L" ≤ 3 m | +50 mm / -0 mm |
| 10 ft < "L" ≤ 25 ft | +3 in / -0 in | 3 m < "L" ≤ 7.5 m | +75 mm / -0 mm |
| 25 ft < "L" | +2%"L" / -0%"L" | 7.5 m < "L" | +2%"L" / -0%"L" |

* Cable Length = "L"

SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder 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: [SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder PE3M0418](#)

URL: <https://www.pasternack.com/smPS-16-contact-socket-to-smPS-16-contact-socket-cable-using-pe-p047-coax-with-heatshrink-lf-solder-pe3m0418-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.

PE3M0418 CAD Drawing

SMPS Size 16 D38999 Contact Socket to SMPS Size 16 D38999 Contact
Socket Cable Using PE-P047 Coax with HeatShrink, LF Solder

