

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

PE3C8486

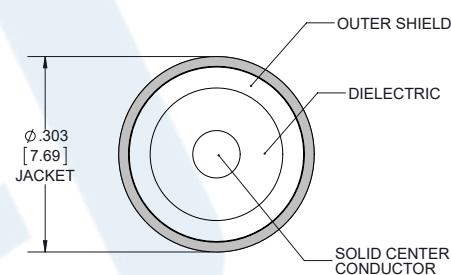
Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: N Female Bulkhead
- Cable Type: SPF-250



Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- FRPE Jacket
- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- CMR Riser Rated Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

Description

Pasternack's PE3C8486 7/16 DIN male to type N female bulkhead cable using SPF-250 coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 7/16 DIN to type N cable assembly has a male to female gender configuration with 50 ohm corrugated SPF-250 coax. The PE3C8486 7/16 DIN male to type N female cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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 | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | 83 | | | % |
| Passive Intermodulation | | | -160 | dBc |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts PE3C8486](#)

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

PE3C8486

| | | |
|-------------|--------------|--------------|
| Capacitance | 24 [78.74] | pF/ft [pF/m] |
| Inductance | 0.054 [0.18] | uH/ft [uH/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|-------|-------|-------|-------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.03 | 0.043 | 0.062 | 0.103 | 0.167 | dB |
| | 0.1 | 0.14 | 0.2 | 0.34 | 0.55 | |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 * \text{SQRT}(F \text{GHz})$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|-------------|
| Length* | 0 in [0 mm] |
| Diameter | 0 in [0 mm] |

Cable

| | |
|--------------------------------------|----------------------|
| Cable Type | SPF-250 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| Dielectric Type | Foam PE |
| Number of Shields | 1 |
| Outer Conductor Material and Plating | Copper |
| Jacket Material | FRPE, Black |
| Jacket Diameter | 0.303 in [7.7 mm] |

| | |
|------------------------------|-----------------------|
| One Time Minimum Bend Radius | 1.25 in [31.75 mm] |
| Bending Moment | 0.5 lbs-ft [0.68 N-m] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts PE3C8486](#)

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

PE3C8486

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|------------------|-------------------------|
| Type | 7/16 DIN Male | N Female Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Silver | Phosphor Bronze, Silver |
| Contact Plating Specification | 196 μ in | 196 μ in |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Tri-Metal |
| Outer Conductor Plating Specification | | 118 μ in |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 118 μ in | 118 μ in |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 118 μ in | |
| Torque | | 6 in-lbs [0.68 Nm] |

Environmental Specifications

Temperature

Operating Range

-40 to +85 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: [Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts PE3C8486](#)

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM
Cable Using SPF-250 Coax Using Times Microwave Parts



RF Cable Assemblies Technical Data Sheet

PE3C8486

How to Order

Part Number Configuration:

PE3C8486

- **xx**

uu

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

Example: PE3C8486-12 = 12 inches long cable
PE3C8486-100cm = 100 cm long cable

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 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: [Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts PE3C8486](#)

URL: <https://www.pasternack.com/7-16-din-male-n-female-spf250-cable-assembly-pe3c8486-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.

PE3C8486 CAD Drawing

Fire Rated 7/16 DIN Male to N Female Bulkhead Low PIM Cable
Using SPF-250 Coax Using Times Microwave Parts

