



Fire Rated 7/16 DIN Male to 7/16 DIN Female  
Low PIM Cable 48 Inch Length Using SPF-375 Coax  
Using Times Microwave Parts

## RF Cable Assemblies Technical Data Sheet

**PE3C6509-48**

### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Female
- Cable Type: SPF-375

### Features

- Max Frequency 6 GHz
- Low PIM: -158 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
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

### Description

Pasternack's PE3C6509-48 7/16 DIN male to 7/16 DIN female 48 inch cable using SPF-375 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 7/16 DIN cable assembly has a male to female gender configuration with 50 ohm corrugated SPF-375 coax. The PE3C6509-48 7/16 DIN male to 7/16 DIN female cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -158 dBc. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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: [Fire Rated 7/16 DIN Male to 7/16 DIN Female Low PIM Cable 48 Inch Length Using SPF-375 Coax Using Times Microwave Parts PE3C6509-48](#)



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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	6		GHz
Insertion Loss (Max.)	0.29	0.37	0.49	0.81		dB

#### Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1\*SQRT(FGHz) dB for the female connector and 0.1 dB for the male connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.86 lbs [390.09 g]

#### Cable

Cable Type SPF-375  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper Clad Aluminum  
Dielectric Type Foam PE  
Number of Shields 1  
Shield Layer 1 Helically Corrugated Copper Tube  
Outer Conductor Material and Plating Copper  
Jacket Material FRPE, Black  
Jacket Diameter 0.435 in [11.05 mm]

One Time Minimum Bend Radius 1.75 in [44.45 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	7/16 DIN Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	5 $\mu$ in	200 $\mu$ in
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	3 $\mu$ in	80 $\mu$ in
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	3 $\mu$ in	

### Environmental Specifications

#### Temperature

Operating Range

-40 to +85 deg C

Environmental Specification Notes:  
CMR (Riser) Fire Rated

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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**PE3C6509-48**

### How to Order

Part Number Configuration:

**PE3C6509**

- **xx**

**uu**

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

Example: PE3C6509-12 = 12 inches long cable  
PE3C6509-100cm = 100 cm long cable

Fire Rated 7/16 DIN Male to 7/16 DIN Female Low PIM Cable 48 Inch Length Using SPF-375 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.

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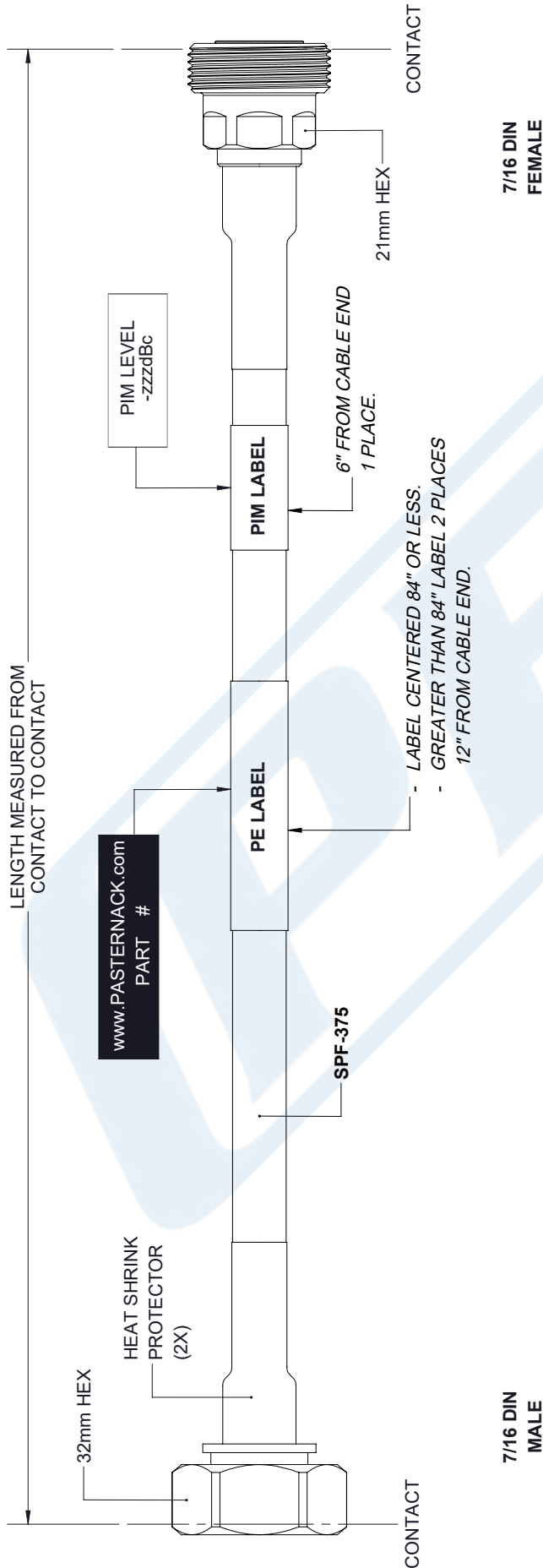
URL: <https://www.pasternack.com/7-16-din-male-7-16-din-female-spf375-cable-assembly-pe3c6509-48-p.aspx>

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# PE3C6509-48 CAD Drawing

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Length Using SPF-375 Coax Using Times Microwave Parts

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	07/19/19	SELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
XX±.01 [.25]	±.005
XXX±.005 [.13]	±.001
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

<b>PE PASTERNAK</b> an INFINITO brand	
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SIZE	PART NUMBER
A	53919
CAGE	K.DANG
DRAWN BY	PE3C6509
REV	A

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SHEET	1 OF 1
SCALE	N/A

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