



Fire Rated 7/16 DIN Male to 7/16 DIN Female
Low PIM Cable 100 cm Length Using SPF-375 Coax
Using Times Microwave Parts

RF Cable Assemblies Technical Data Sheet

PE3C6509-100CM

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 PE3C6509-100CM 7/16 DIN male to 7/16 DIN female 100 cm 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 PE3C6509-100CM 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 100 cm Length Using SPF-375 Coax Using Times Microwave Parts PE3C6509-100CM](#)



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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.)	0.27	0.34	0.45	0.73		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 0.76 lbs [344.73 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 µin	200 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	3 µin	80 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	3 µin	

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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How to Order

Part Number Configuration:

PE3C6509

- **xx**

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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 100 cm 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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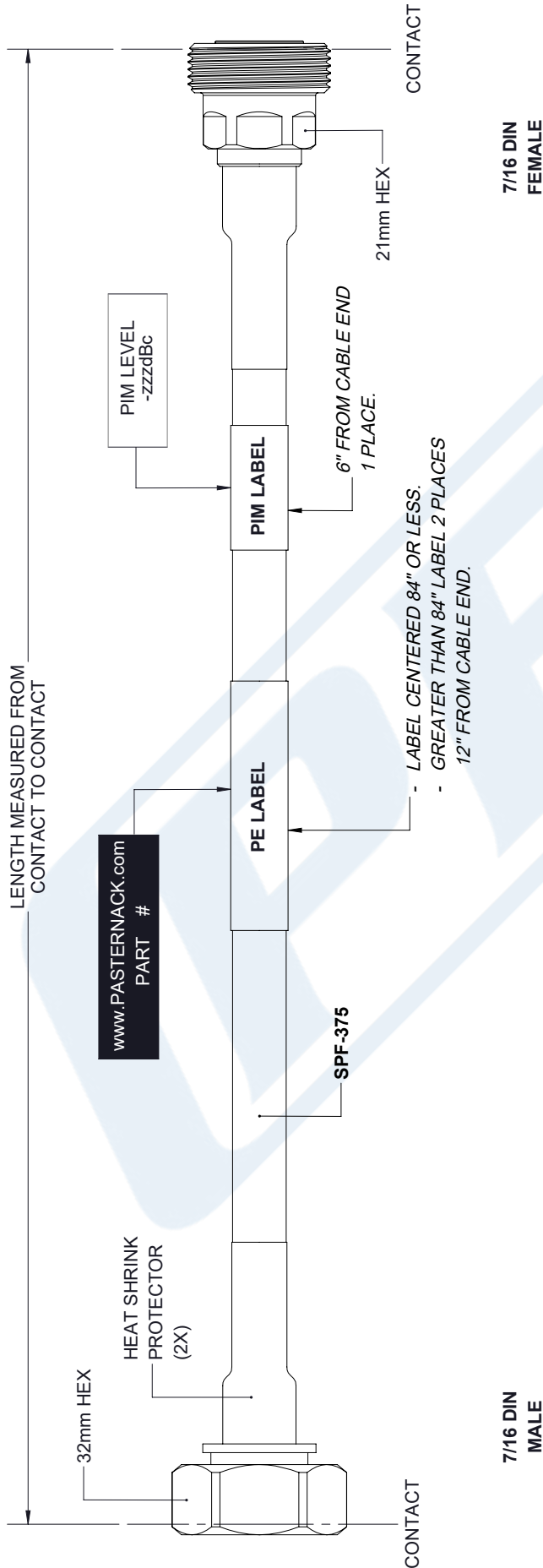
URL: <https://www.pasternack.com/7-16-din-male-7-16-din-female-spf375-cable-assembly-pe3c6509-100cm-p.aspx>

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.

PE3C6509-100CM CAD Drawing

Fire Rated 7/16 DIN Male to 7/16 DIN Female Low PIM Cable 100 cm
Length Using SPF-375 Coax Using Times Microwave Parts

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



PE PASTERNAK an INFINITO brand Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.	
SHEET 1 OF 1 SCALE N/A		REV A	
SIZE A CAGE 53919 DRAWN BY K.DANG PART NUMBER PE3C6509		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X±.2 [5.08] XX±.01 [.25] XXX±.005 [.13] FRACTIONS ±1/32 ANGLES ±1° ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. THIRD-ANGLE PROJECTION	

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