

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



FMCA2069-48

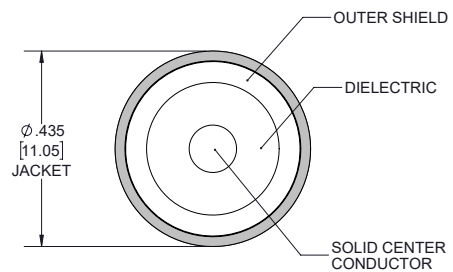
Configuration

- Connector 1: 7/16 DIN Male TC-SPP375-716M-LP
- Connector 2: 7/16 DIN Male TC-SPP375-716M-LP
- Cable Type: SPF-375
- Coax Flex Type: Corrugated



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

The 7/16 DIN male to 7/16 DIN male 48 inch cable using SPF-375 coax, part number FMCA2069-48, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm corrugated SPF-375 coax. Fairview Microwave's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -158 dBc. The FMCA2069-48 7/16 DIN male to 7/16 DIN male cable assembly operates to 6 GHz. 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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				

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



FMCA2069-48

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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.)	0.32	0.37	0.45	0.66		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 dB per connector.

Mechanical Specifications

Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	1.14 in [28.96 mm]

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 1 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]

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



FMCA2069-48

Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	5 μin	5 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	3 μin	3 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	3 μin	3 μin

Environmental Specifications

Operating Range Temperature -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.

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



FMCA2069-48

Typical Performance Data

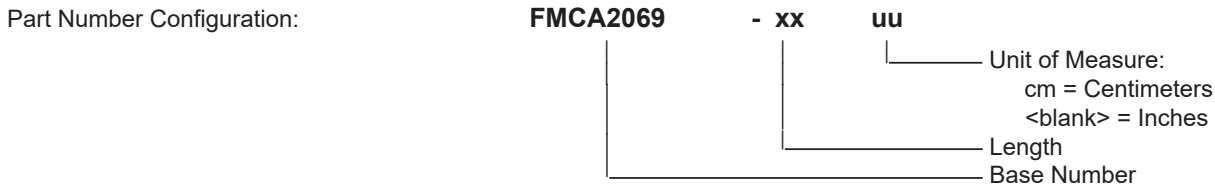


Fire Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable
 SPF-375 Coax in 48 Inch Using Times Microwave Parts



FMCA2069-48

How to Order



Example: FMCA2069-12 = 12 inches long cable
 FMCA2069-100cm = 100 cm long cable

Fire Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPF-375 Coax in 48 Inch Using Times Microwave Parts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

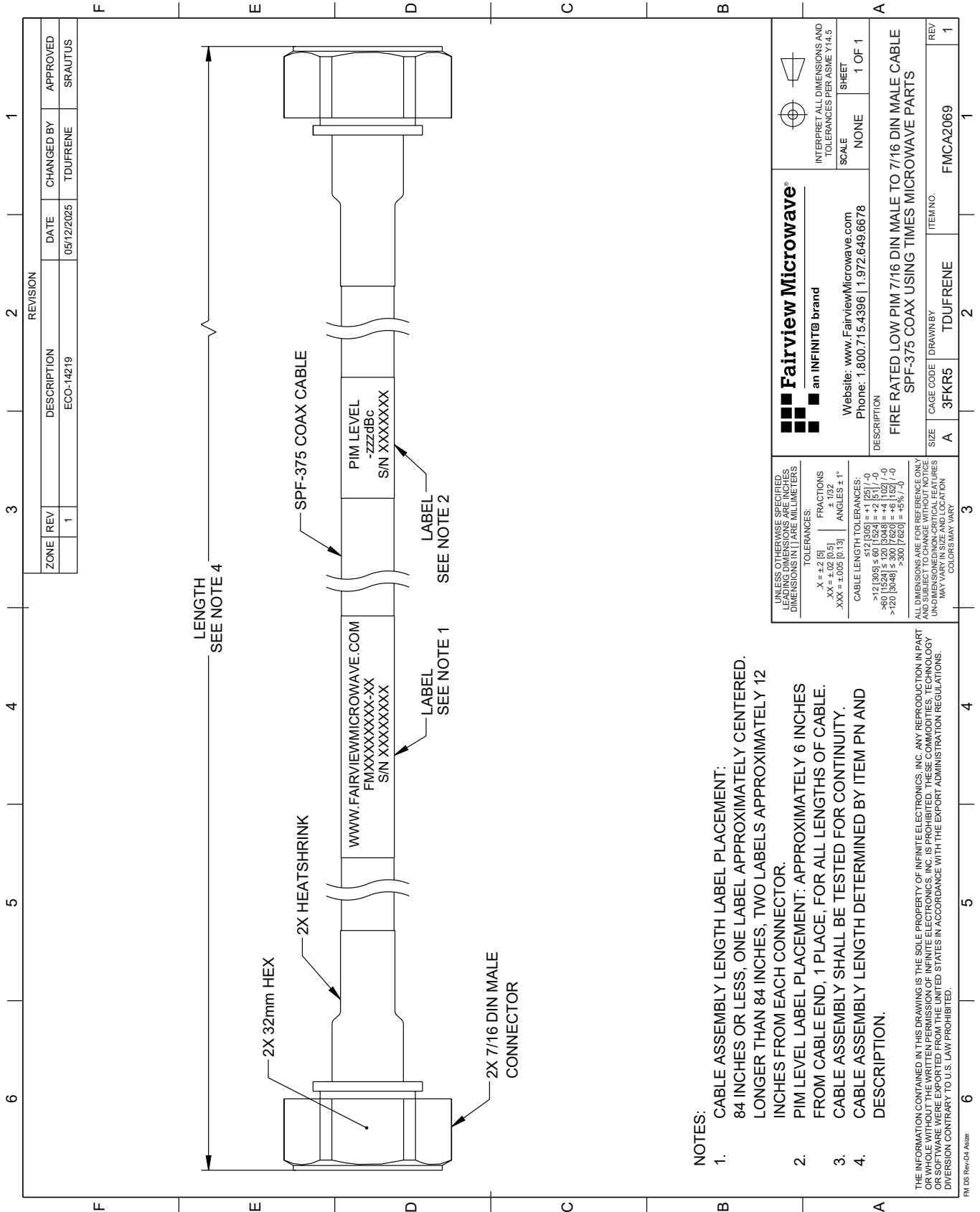
For additional information on this product, please click the following link: [Fire Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPF-375 Coax in 48 Inch Using Times Microwave Parts FMCA2069-48](https://www.fairviewmicrowave.com/low-pim-7-16-din-male-7-16-din-male-cable-spf375-coax-fmca2069-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-7-16-din-male-7-16-din-male-cable-spf375-coax-fmca2069-48-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMCA2069-48 CAD Drawing

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



NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
- CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

FM DS Rev-D4 Alt26