

Fire Rated SMA Male to SMA Male Low Loss Cable Using LMR-240-FR Coax with Times Microwave Components



PE3W15713

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: LMR-240-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- FRPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15713 SMA male to SMA male cable using LMR-240-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-FR coax. The PE3W15713 SMA male to SMA male cable assembly operates to 6 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W15713	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
			0.13	0.19	0.26	0.43	0.67	dB/m	
PE3W15713-12	12 In	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.41	dB	0.079
PE3W15713-24	24 In	Insertion Loss (Typ.)	0.28	0.31	0.36	0.46	0.61	dB	0.118
PE3W15713-36	36 In	Insertion Loss (Typ.)	0.32	0.37	0.44	0.59	0.82	dB	0.157
PE3W15713-48	48 In	Insertion Loss (Typ.)	0.36	0.42	0.52	0.72	1.02	dB	0.196
PE3W15713-60	60 In	Insertion Loss (Typ.)	0.4	0.48	0.6	0.85	1.22	dB	0.235

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:	0.079 pounds
Additional Weight per Inch:	0.00325 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.079 lbs [35.83 g]

Cable

Cable Type	LMR-240-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	FRPE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM B488	ASTM B488
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	5/16 Inch	5/16 Inch

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W15713

Typical Performance Data

How to Order

Part Number Configuration:

PE3W15713

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W15713-12 = 12 inches long cable
PE3W15713-100cm = 100 cm long cable

Fire Rated SMA Male to SMA Male Low Loss Cable Using LMR-240-FR Coax with Times Microwave Components 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 SMA Male to SMA Male Low Loss Cable Using LMR-240-FR Coax with Times Microwave Components PE3W15713](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-sma-male-low-loss-cable-using-lmr-240-fr-pe3w15713-p.aspx>

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PE3W15713 CAD Drawing

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