

Low Loss 7/16 DIN Male to N Male Weatherproof Cable SPO-250 Coax with Times Microwave Components

FMCA2012/WP

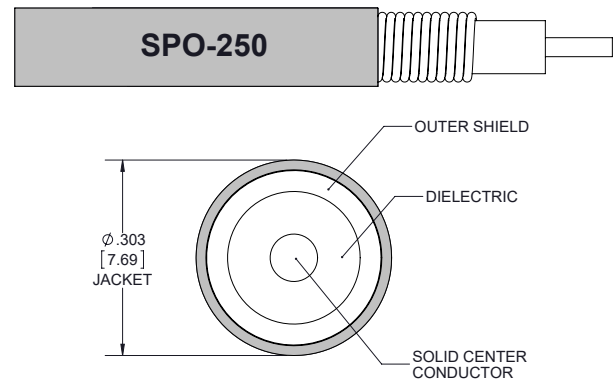


Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: N Male
- Cable Type: SPO-250
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



Applications

- General Purpose
- Laboratory Use

Description

The Fairview Microwave FMCA2012/WP is a weatherproof low loss cable assembly that comes with 7/16 DIN male connection with weatherproof boot on one end and type N male with weatherproof boot on the other. Fairview Microwave's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.303 inches diameter. The 7/16 DIN male to type N male cable assembly FMCA2012/WP is built with SPO-250 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and foam PE dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this FMCA2012/WP low loss RF cable are available on our downloadable PDF datasheet.

Fairview Microwave stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal 7/16 DIN male to type N male cable assembly as per your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		24 [78.74]		pF/ft [pF/m]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	6000	MHz	
FMCA2012/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.068	0.108	dB/ft	
			0.1	0.14	0.23	0.36	dB/m	
FMCA2012/WP-12	12 Inch	Insertion Loss (Typ.)	0.17	0.25	0.39	0.6	dB	0.798
FMCA2012/WP-24	24 Inch	Insertion Loss (Typ.)	0.2	0.29	0.46	0.71	dB	0.845
FMCA2012/WP-36	36 Inch	Insertion Loss (Typ.)	0.23	0.33	0.53	0.82	dB	0.892
FMCA2012/WP-60	60 Inch	Insertion Loss (Typ.)	0.29	0.41	0.66	1.03	dB	0.986
FMCA2012/WP-50CM	50 CM	Insertion Loss (Typ.)	0.19	0.27	0.43	0.67	dB	0.829

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*SQRT(FGHz) dB
Loss due to Connector 2:	0.1*SQRT(FGHz) dB
Base Weight:	0.798 pounds
Additional Weight per Inch:	0.00391 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.798 lbs [361.97 g]

Cable

Cable Type	SPO-250
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Outer Conductor 1 Material and Plating	Copper, Corrugated
Jacket Material	PE
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	N Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 µin minimum	196 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 µin minimum	118 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	118 µin minimum	118 µin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration:

FMCA2012/WP - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA2012/WP-12 = 12 inches long cable
FMCA2012/WP-100cm = 100 cm long cable

Low Loss 7/16 DIN Male to N Male Weatherproof Cable SPO-250 Coax with Times Microwave Components 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: [Low Loss 7/16 DIN Male to N Male Weatherproof Cable SPO-250 Coax with Times Microwave Components FMCA2012/WP](#)

URL: <https://www.fairviewmicrowave.com/low-loss-7-16-din-male-to-n-male-weatherproof-cable-spo-250-coax-with-times-microwave-components-fmca2012-wp-p.aspx>

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FMCA2012/WP CAD Drawing

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