

Low Loss N Male to N Female Weatherproof Cable
SPO-250 Coax in 50 cm with Times Microwave Components



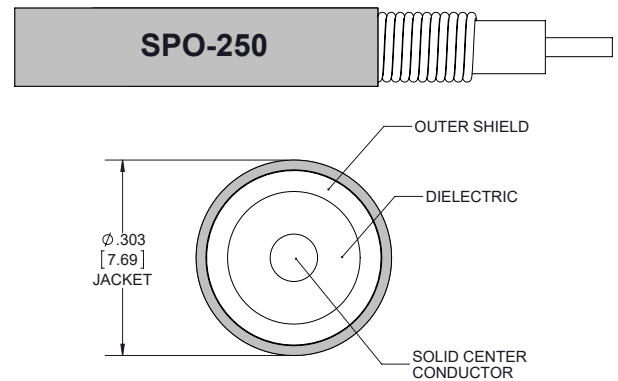
FMCA2562/WP-50CM

Configuration

- Connector 1: N Male
- Connector 2: N Female
- 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 type N male to type N female 50 cm cable using SPO-250 coax, part number FMCA2562/WP-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to female gender configuration with 50 ohm flexible SPO-250 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2562/WP-50CM type N male to type N female cable assembly operates to 6 GHz.

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			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	6000	
FMCA2562/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	
FMCA2562/WP-24	24 In	Insertion Loss (Typ.)	0.2	0.29	0.46	0.71	dB	0.751
FMCA2562/WP-36	36 In	Insertion Loss (Typ.)	0.23	0.33	0.53	0.82	dB	0.798
FMCA2562/WP-60	60 In	Insertion Loss (Typ.)	0.29	0.2	0.66	1.03	dB	0.892
FMCA2562/WP-50CM	50 CM	Insertion Loss (Typ.)	0.19	0.27	0.43	0.67	dB	0.735

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: 0.704 pounds
 Additional Weight per Inch: 0.00391 pounds

Mechanical Specifications

Cable Assembly

Length 19.685 in [500 mm]
 Width/Diameter 0.5 in [12.7 mm]
 Weight 0.735 lbs [333.39 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	N Male	N Female
Option	Weatherproof Boot	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	196 µin minimum	200 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		100 µin minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	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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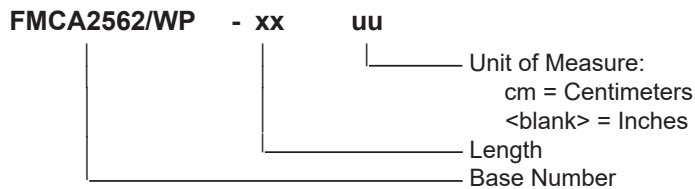


FMCA2562/WP-50CM

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2562/WP-12 = 12 inches long cable
FMCA2562/WP-100cm = 100 cm long cable

Low Loss N Male to N Female Weatherproof Cable SPO-250 Coax in 50 cm 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.

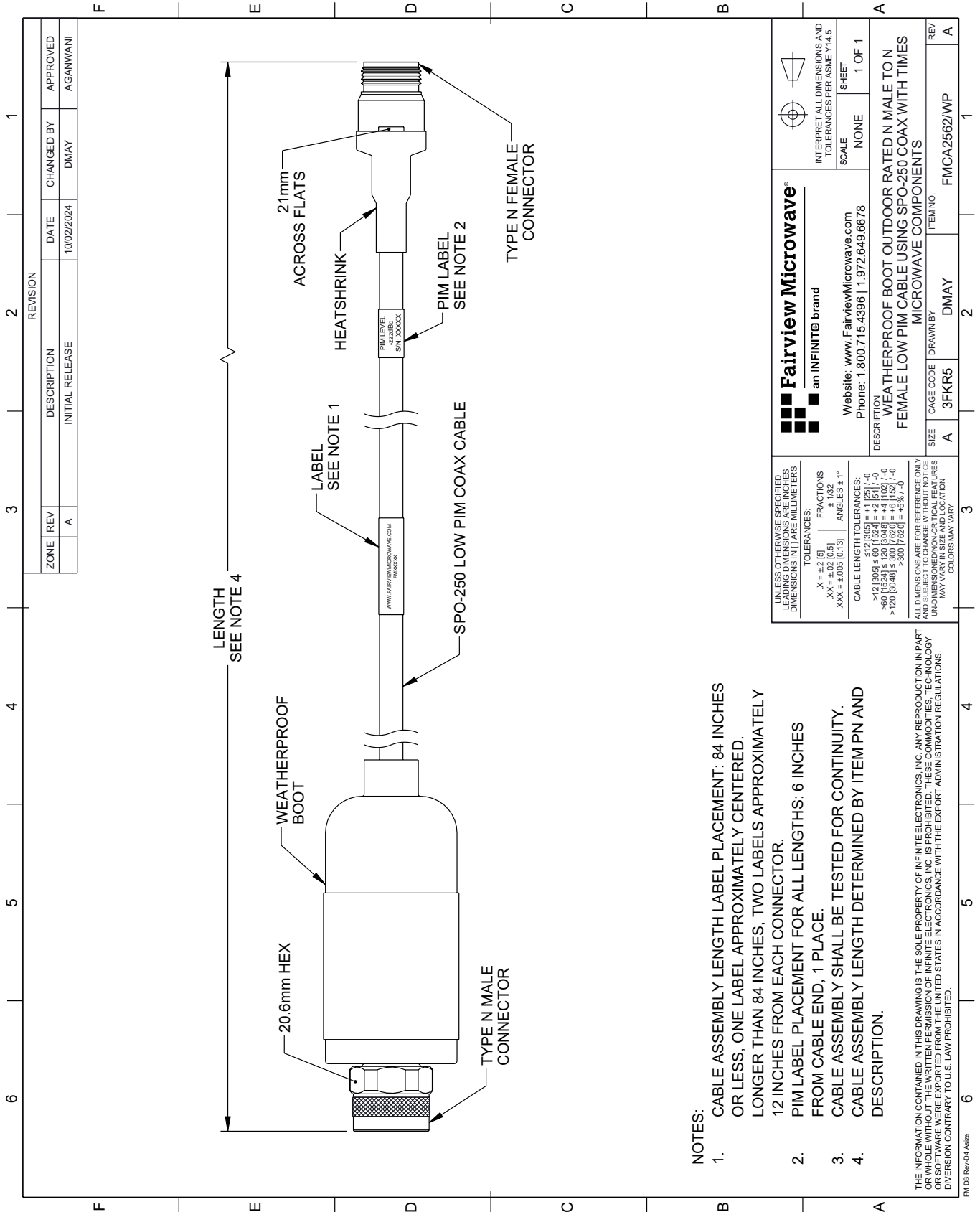
For additional information on this product, please click the following link: [Low Loss N Male to N Female Weatherproof Cable SPO-250 Coax in 50 cm with Times Microwave Components FMCA2562/WP-50CM](https://www.fairviewmicrowave.com/low-loss-n-male-to-n-female-weatherproof-cable-spo-250-coax-in-50-cm-with-times-microwave-components-fmca2562/wp-50cm)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-n-female-weatherproof-cable-spo-250-coax-in-50-cm-with-times-microwave-components-fmca2562/wp-50cm-p.aspx>

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FMCA2562/WP-50CM CAD Drawing

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NOTES:

1. 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.
2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 A426

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/02/2024	DMAY	AGANWANI

<p>Fairview Microwave an INFINIT® brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5] ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 [305] ≤ 60 [1524] = ±.1 [25] / -0</p> <p>>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0</p> <p>>120 [3048] ≤ 300 [7620] = ±.6 [15] / -0</p>		
<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION</p> <p>WEATHERPROOF BOOT OUTDOOR RATED N MALE TO N FEMALE LOW PIM CABLE USING SPO-250 COAX WITH TIMES MICROWAVE COMPONENTS</p>	<p>SIZE</p> <p>A</p>	<p>REV</p> <p>A</p>
<p>CAGE CODE</p> <p>3FKR5</p>	<p>DRAWN BY</p> <p>DMAY</p>	<p>ITEM NO.</p> <p>FMCA2562/WP</p>