

Low Loss RA N Male to N Male Weatherproof Cable
SPO-250 Coax in 36 Inch with Times Microwave Components



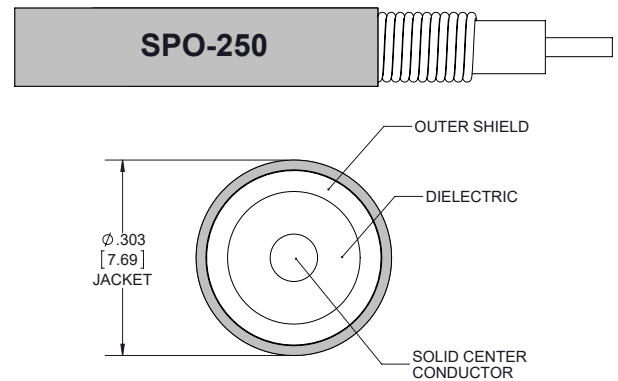
FMCA2558/WP-36

Configuration

- Connector 1: N Male Right Angle
- 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 RA type N male to type N male 36 inch cable using SPO-250 coax, part number FMCA2558/WP-36, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male 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 FMCA2558/WP-36 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the SPO-250 cable allows for easier connections in tight spaces.

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	
FMCA2558/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.057	0.041	0.068	0.108	dB/ft	
			0.19	0.14	0.23	0.36	dB/m	
FMCA2558/WP-24	24 In	Insertion Loss (Typ.)	0.33	0.39	0.5	0.67	dB	0.741
FMCA2558/WP-36	36 In	Insertion Loss (Typ.)	0.36	0.43	0.57	0.77	dB	0.788
FMCA2558/WP-60	60 In	Insertion Loss (Typ.)	0.42	0.51	0.7	0.99	dB	0.882
FMCA2558/WP-50CM	50 CM	Insertion Loss (Typ.)	0.32	0.37	0.47	0.63	dB	0.725

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: 0.2 dB
 Loss due to Connector 2: 0.1*SQRT(FGHz) dB
 Base Weight: 0.694 pounds
 Additional Weight per Inch: 0.00391 pounds

Mechanical Specifications

Cable Assembly

Length 36 in [914.4 mm]
 Width/Diameter 0.5 in [12.7 mm]
 Weight 0.788 lbs [357.43 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 Right Angle	N Male
Option		Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin minimum	196 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	118 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 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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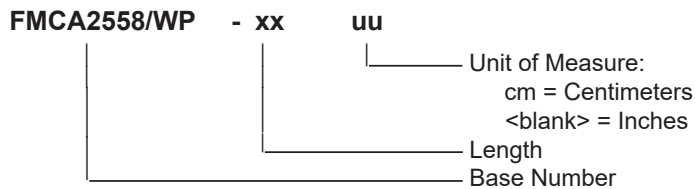


FMCA2558/WP-36

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2558/WP-12 = 12 inches long cable
FMCA2558/WP-100cm = 100 cm long cable

Low Loss RA N Male to N Male Weatherproof Cable SPO-250 Coax in 36 Inch 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.

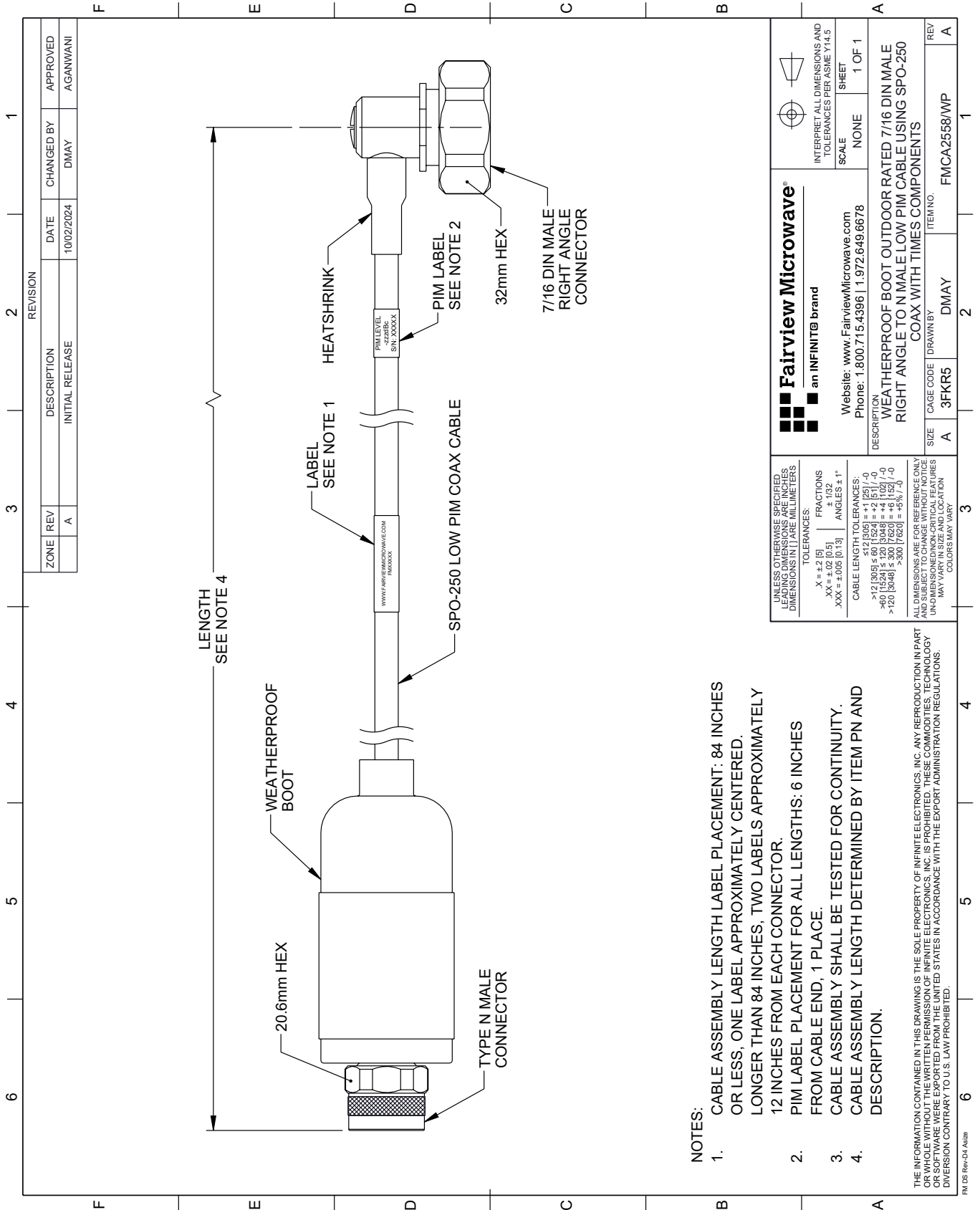
For additional information on this product, please click the following link: [Low Loss RA N Male to N Male Weatherproof Cable SPO-250 Coax in 36 Inch with Times Microwave Components FMCA2558/WP-36](https://www.fairviewmicrowave.com/low-loss-ra-n-male-to-n-male-weatherproof-cable-spo-250-coax-in-36-inch-with-times-microwave-components-fmca2558/wp-36)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-n-male-to-n-male-weatherproof-cable-spo-250-coax-in-36-inch-with-times-microwave-components-fmca2558/wp-36-p.aspx>

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FMCA2558/WP-36 CAD Drawing

Low Loss RA N Male to N Male Weatherproof Cable SPO-250 Coax in 36 Inch with Times Microwave Components



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 Alt2b

<p>Fairview Microwave® an INFINIT® brand</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>	
<p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>SCALE: NONE SHEET: 1 OF 1</p>	
<p>DESCRIPTION: WEATHERPROOF BOOT OUTDOOR RATED 7/16 DIN MALE RIGHT ANGLE TO N MALE LOW PIM CABLE USING SPO-250 COAX WITH TIMES COMPONENTS</p>			
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.</p>	<p>TOLERANCES:</p> <p>X = ±.2 [5] XX = ±.02 [0.5] XXX = ±.005 [0.13]</p> <p>FRACTIONS: ± 1/32 ANGLES ± 1°</p>	<p>CABLE LENGTH TOLERANCES:</p> <p><12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0 >60 [1524] ≤ 120 [3048] = ±.1 [2.5] / -0 >120 [3048] ≤ 300 [7620] = ±.5% / -0</p>	<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE NON-CRITICAL FEATURES. MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>
<p>ZONE</p>	<p>REV</p>	<p>DESCRIPTION</p>	<p>DATE</p>
A	A	INITIAL RELEASE	10/02/2024
<p>REVISION</p>		<p>CHANGED BY</p>	<p>APPROVED</p>
		DMAY	AGANWANI
<p>SIZE</p>	<p>CAGE CODE</p>	<p>DRAWN BY</p>	<p>ITEM NO.</p>
A	3FKR5	DMAY	FMCA2558/WP