

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components



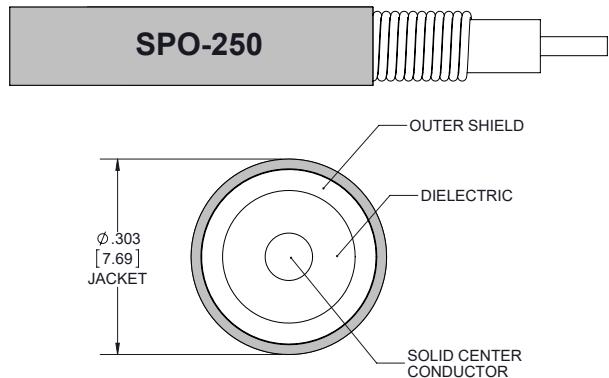
PE3C8508/WP

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 Pasternack PE3C8508/WP is a weatherproof low loss cable assembly that comes with type N male connection with weatherproof boot on one end and type N female on the other. Pasternack'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 type N male to type N female cable assembly PE3C8508/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 PE3C8508/WP low loss RF cable are available on our downloadable PDF datasheet.

Pasternack 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 type N male to type N female 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	
PE3C8508/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	
PE3C8508/WP-24	24 in	Insertion Loss (Typ.)	0.2	0.29	0.46	0.71	dB	0.751
PE3C8508/WP-36	36 in	Insertion Loss (Typ.)	0.23	0.33	0.53	0.82	dB	0.798
PE3C8508/WP-60	60 in	Insertion Loss (Typ.)	0.29	0.2	0.66	1.03	dB	0.892
PE3C8508/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: $0.1 * \text{SQRT}(F \text{ GHz})$ dB

Loss due to Connector 2: $0.1 * \text{SQRT}(F \text{ GHz})$ dB

Base Weight: 0.704 pounds

Additional Weight per Inch: 0.00391 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.704 lbs [319.33 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 μ in minimum	200 μ in minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		100 μ in minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 μ in minimum	100 μ in minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	118 μ in 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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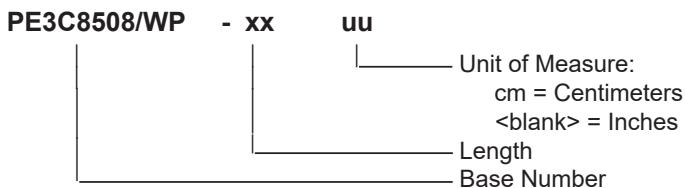


PE3C8508/WP

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C8508/WP-12 = 12 inches long cable
PE3C8508/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 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.

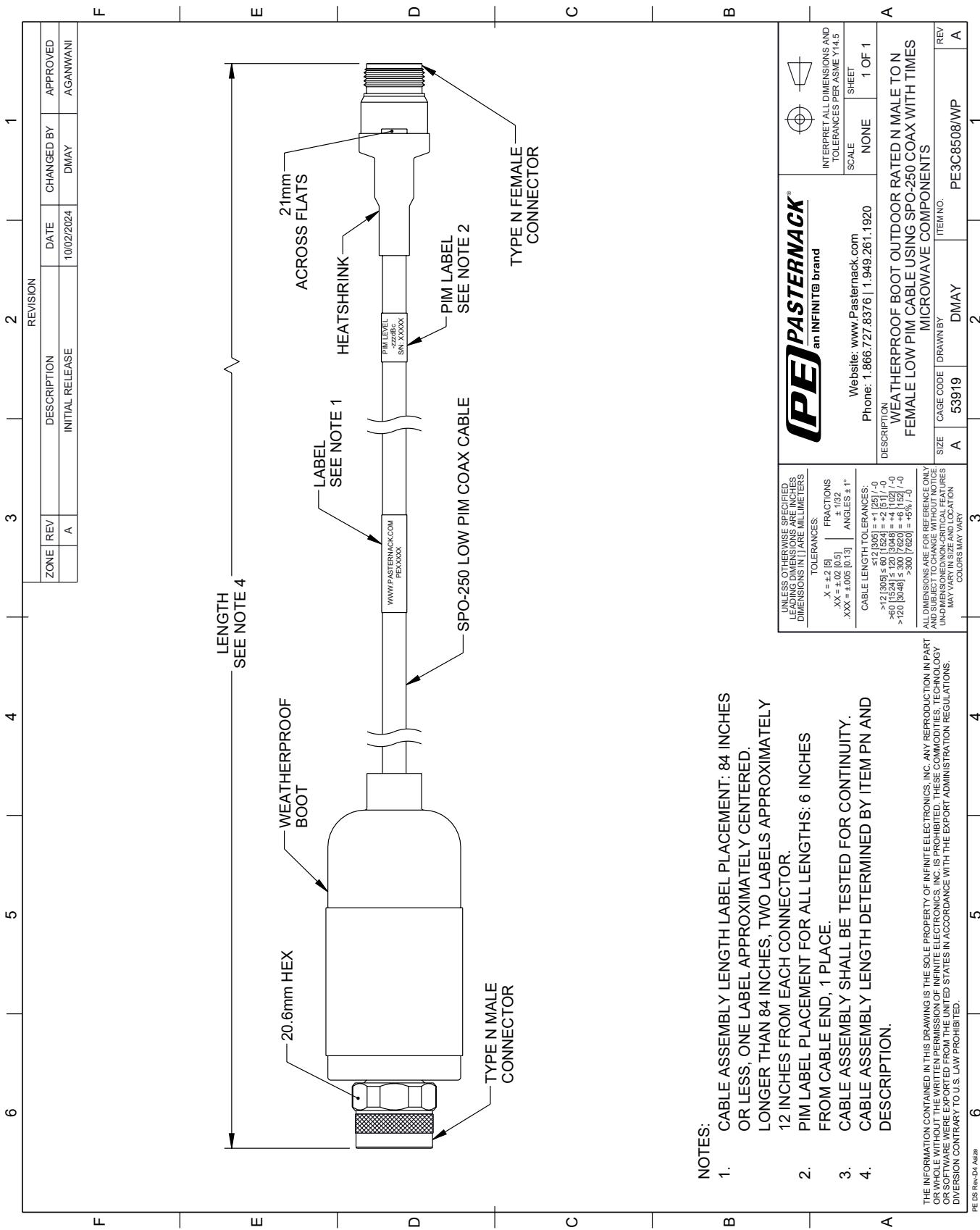
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 N Male \(Plug\) to N Female \(Jack\) Low Loss Cable Using SPO-250 Coax with Times Microwave Components PE3C8508/WP](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-female-jack-low-loss-cable-using-spo-250-pe3c8508-wp-p.aspx>

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PE3C8508/WP CAD Drawing

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NOTES.

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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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