

Waterproof IP68 SMA Male (Plug) to SMA Male (Plug) Right Angle Low Loss Cable Using LMR-240 Coax with Times Microwave Components



PE3W02246/WP

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



Applications

- General Purpose
- Laboratory Use

Description

The Pasternack PE3W02246/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and SMA male 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 0.240 inches diameter. The SMA male to SMA male cable assembly PE3W02246/WP is built with LMR-240 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper as cable's inner conducting material and PE (F) dielectric type. The weatherproof boot low loss cable is reusable and can withstand elements including extreme temperature. Additional dimensions, specifications, and CAD drawings for this PE3W02246/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 SMA male to SMA 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		84		%
RF Shielding	90			dB
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]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			1,500	Vdc
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W02246/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.057	0.055	0.079	0.129	0.204	dB/ft	
			0.19	0.19	0.26	0.43	0.67	dB/m	
PE3W02246/WP-24	24 In	Insertion Loss (Typ.)	0.38	0.41	0.46	0.56	0.71	dB	0.605
PE3W02246/WP-36	36 In	Insertion Loss (Typ.)	0.42	0.47	0.54	0.69	0.92	dB	0.638
PE3W02246/WP-48	48 In	Insertion Loss (Typ.)	0.46	0.52	0.62	0.82	1.12	dB	0.671
PE3W02246/WP-60	60 In	Insertion Loss (Typ.)	0.5	0.58	0.7	0.95	1.32	dB	0.704

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:	0.2 dB
Base Weight:	0.572 pounds
Additional Weight per Inch:	0.00275 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.572 lbs [259.45 g]

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
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 Right Angle
Option	Weatherproof Boot	
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	
Body Material and Plating	Passivated Stainless Steel, Gold	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	
Boot Material	Silicone	Silicone

Environmental Specifications

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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PE3W02246/WP

Typical Performance Data

How to Order

Part Number Configuration:

PE3W02246/WP - xx uu



Example: PE3W02246/WP-12 = 12 inches long cable
PE3W02246/WP-100cm = 100 cm long cable

Waterproof IP68 SMA Male (Plug) to SMA Male (Plug) Right Angle Low Loss Cable Using LMR-240 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.

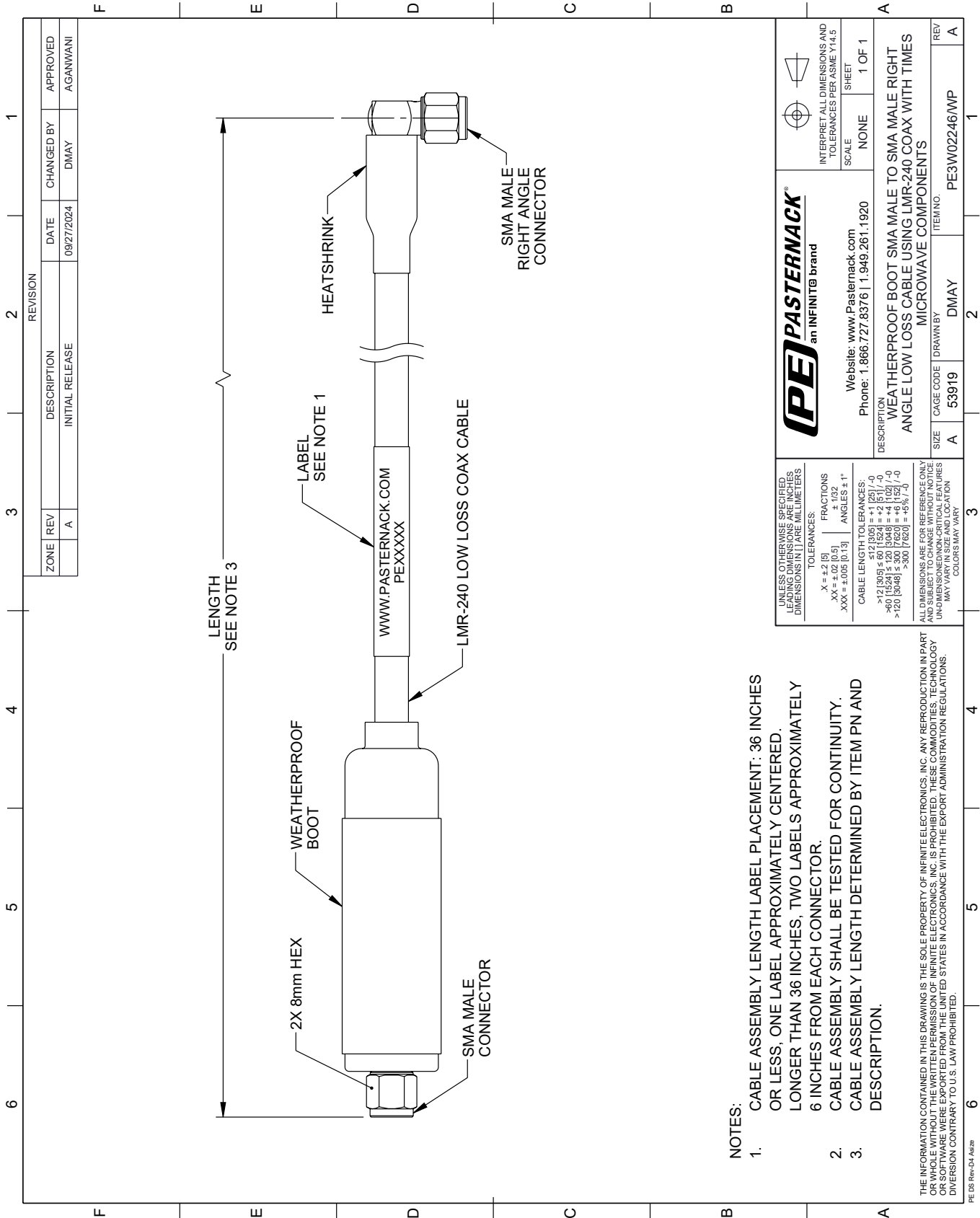
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 SMA Male \(Plug\) to SMA Male \(Plug\) Right Angle Low Loss Cable Using LMR®-240 Coax with Times Microwave Components PE3W02246/WP](https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-sma-male-plug-right-angle-low-loss-cable-using-lmr-240-pe3w02246-wp-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-sma-male-plug-low-loss-cable-using-lmr-240-pe3w02246-wp-p.aspx>

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PE3W02246/WP CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 Add2

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/27/2024	DMAY	AGANWANI

 an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: WEATHERPROOF BOOT SMA MALE TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-240 COAX WITH TIMES MICROWAVE COMPONENTS		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3W02246/WP
DRAWN BY: DMAY		REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS:
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 $+12 [305] \leq 60 [1524] = +2 [51] / -0$
 $+60 [1524] \leq 120 [3048] = +4 [102] / -0$
 $+300 [7620] \leq 300 [7620] = +5% [7.6]$

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.