

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



PE3C6947/WP

Configuration

- Connector 1: SMA Male
- Connector 2: TNC 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 PE3C6947/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and TNC 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 TNC male cable assembly PE3C6947/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 PE3C6947/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 TNC 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]

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



PE3C6947/WP

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	250	500	1000	2500	6000	MHz	
PE3C6947/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
			0.13	0.19	0.26	0.43	0.67	dB/m	
PE3C6947/WP-24	24 In	Insertion Loss (Typ.)	0.38	0.41	0.46	0.56	0.71	dB	0.653
PE3C6947/WP-36	36 In	Insertion Loss (Typ.)	0.42	0.47	0.54	0.69	0.92	dB	0.686
PE3C6947/WP-48	48 In	Insertion Loss (Typ.)	0.46	0.52	0.62	0.82	1.12	dB	0.719
PE3C6947/WP-60	60 In	Insertion Loss (Typ.)	0.5	0.58	0.7	0.95	1.32	dB	0.752

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: 0.62 pounds

Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter .5 in [12.7 mm]
Weight 0.62 lbs [281.23 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]

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



PE3C6947/WP

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC 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	Brass, Tri-Metal
Body Plating Specification	SAE-AMS-2700	80 µin minimum
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Plating Specification	SAE-AMS-2700	80 µin minimum
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.

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



PE3C6947/WP

Typical Performance Data

How to Order

Part Number Configuration:

PE3C6947/WP

- xx

uu

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

Length

Base Number

Example: PE3C6947/WP-12 = 12 inches long cable
PE3C6947/WP-100cm = 100 cm long cable

Waterproof IP68 SMA Male (Plug) to TNC 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.

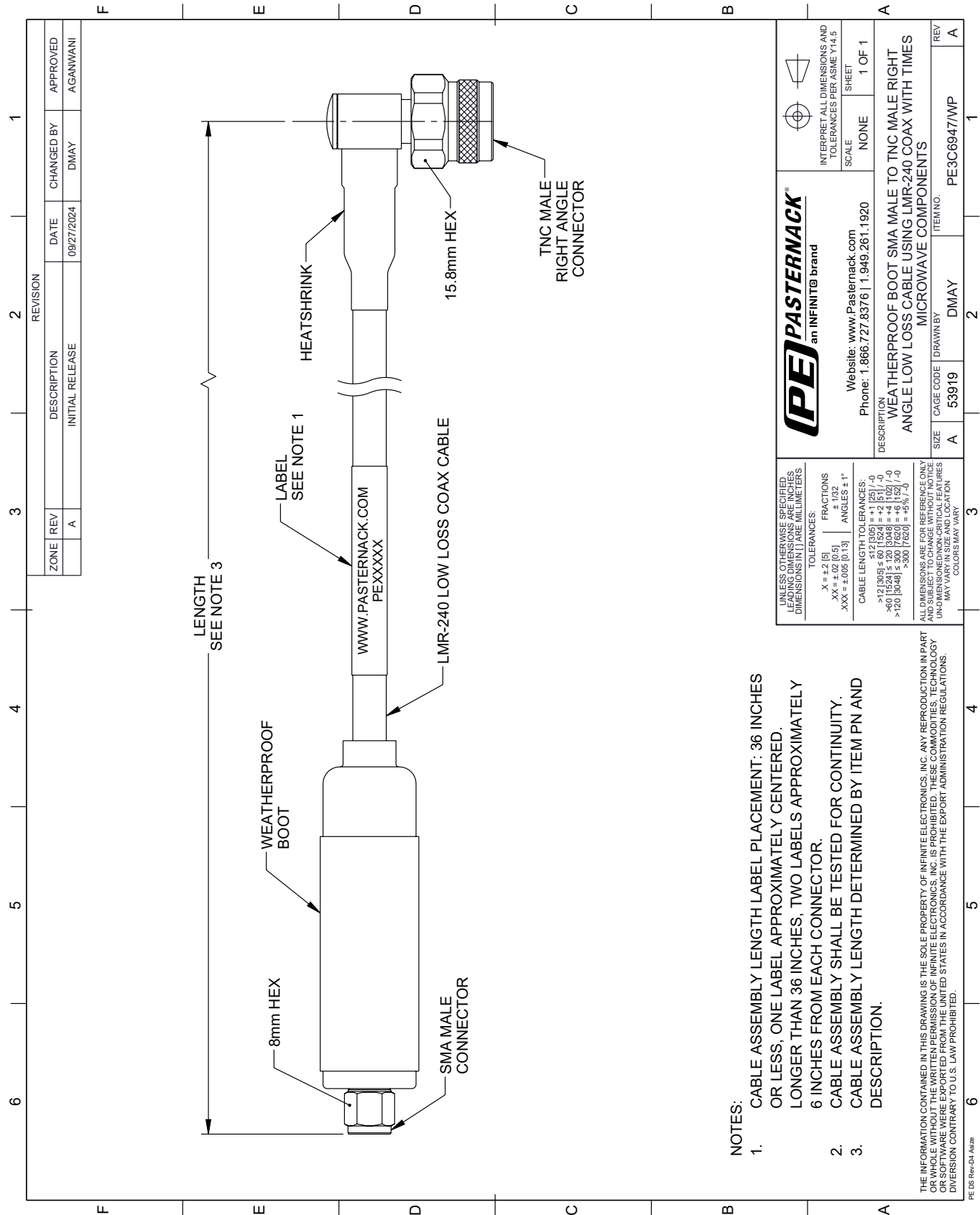
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 SMA Male \(Plug\) to TNC Male \(Plug\) Right Angle Low Loss Cable Using LMR®-240 Coax with Times Microwave Components PE3C6947/WP](https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-tnc-male-plug-right-angle-low-loss-cable-using-lmr-240-pe3c6947-wp-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-tnc-male-plug-low-loss-cable-using-lmr-240-pe3c6947-wp-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C6947/WP CAD Drawing

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



- 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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

PE D8 Rev-D4 Adda