

## Waterproof IP68 SMA Male to SMA Male Right Angle Low Loss Cable 60 Inch Length Using LMR-240 Coax with Times Microwave Components



### PE3C0104/WP-60

#### 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

Pasternack's PE3C0104/WP-60 SMA male to SMA male right angle 60 inch cable using LMR-240 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3C0104/WP-60 SMA male to SMA male cable assembly operates to 6 GHz. The right angle SMA interface on the LMR-240 cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. 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		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]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			1,500	Vdc

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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C0104/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	
PE3C0104/WP-24	24 Inch	Insertion Loss (Typ.)	0.38	0.41	0.46	0.56	0.71	dB	0.607
PE3C0104/WP-36	36 Inch	Insertion Loss (Typ.)	0.42	0.47	0.54	0.69	0.92	dB	0.64
PE3C0104/WP-48	48 Inch	Insertion Loss (Typ.)	0.46	0.52	0.62	0.82	1.12	dB	0.673
PE3C0104/WP-60	60 Inch	Insertion Loss (Typ.)	0.5	0.58	0.7	0.95	1.32	dB	0.706

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:	0.574 pounds
Additional Weight per Inch:	0.00275 pounds

### Mechanical Specifications

#### Cable Assembly

Length	60 in [152.4 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.706 lbs [320.24 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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## PE3C0104/WP-60

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Option	Weatherproof Boot	
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Brass/Phosphor Bronze, Gold
Contact Plating Specification	ASTM B488	50 μin minimum
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Brass, Tri-Metal	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 μin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification		80 μin minimum
Boot Material	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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### PE3C0104/WP-60

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C0104/WP - xx uu**

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

Length

Base Number

Example: PE3C0104/WP-12 = 12 inches long cable  
PE3C0104/WP-100cm = 100 cm long cable

Waterproof IP68 SMA Male to SMA Male Right Angle Low Loss Cable 60 Inch Length 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.

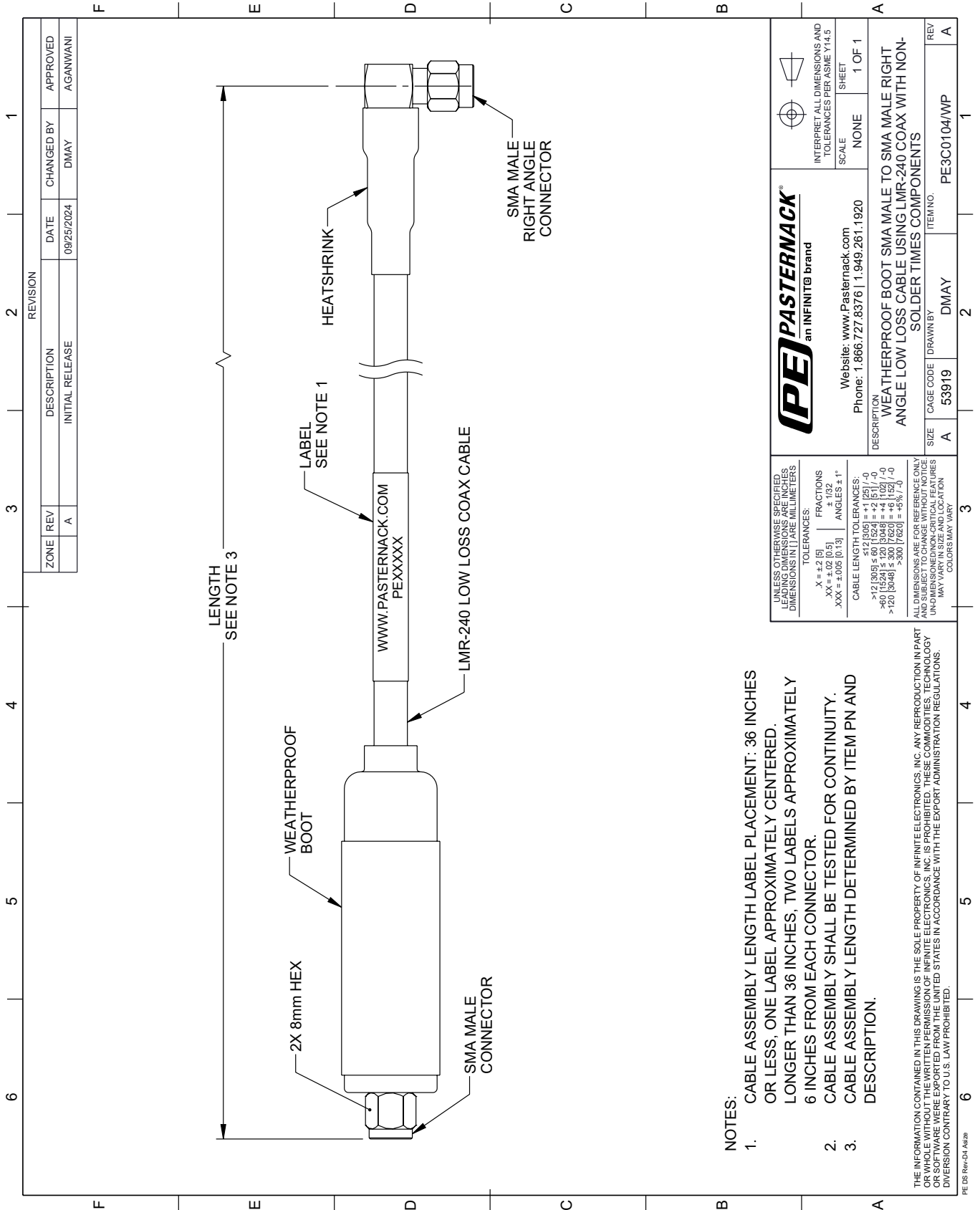
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 SMA Male to SMA Male Right Angle Low Loss Cable 60 Inch Length Using LMR-240 Coax with Times Microwave Components PE3C0104/WP-60](#)

URL: <https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-sma-male-plug-low-loss-cable-60-inch-length-using-lmr-240-pe3c0104-wp-60-p.aspx>

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# PE3C0104/WP-60 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.