



# **RF Cable Assemblies Technical Data Sheet**

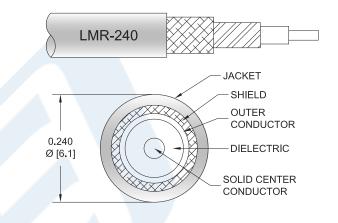
PE3C1830-48

# Configuration

Connector 1: SMA MaleConnector 2: BNC MaleCable Type: LMR-240

#### **Features**

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- · Double Shielded
- PE Jacket



# **Applications**

· General Purpose

· Laboratory Use

### Description

Pasternack's PE3C1830-48 SMA male to BNC male 48 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 BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3C1830-48 SMA male to BNC male cable assembly operates to 4 GHz. 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male to BNC Male Cable 48 Inch Length Using LMR-240 Coax PE3C1830-48

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

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### PE3C1830-48

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR		1.45:1		
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω/1000ft [Ω/Km]
Jacket Spark			5,000	Vrms

### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Max.)	0.28	0.36	0.44	0.52	0.84	dB

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector loss.

### **Mechanical Specifications**

## **Cable Assembly**

Length\* 48 in [121.92 cm]
Diameter 0.58 in [14.73 mm]

#### Cable

Cable Type
Impedance
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Lever 1

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PE, Black

Jacket Material PE, Black

Jacket Diameter 0.24 in [6.1 mm]

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One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength 0.75 in [19.05 mm] 2.5 in [63.5 mm] 0.25 lbs-ft [0.34 N-m] 20 lbs/in [0.36 Kg/mm] 80 lbs [36.29 Kg]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	SMA Male	BNC Male		
Specification	MIL-STD-348	MIL-STD-348		
Impedance	50 Ohms	50 Ohms		
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold		
Contact Plating Specification	ASTM B488			
Dielectric Type	Teflon	PTFE		
Body Material and Plating	Passivated Stainless Steel	Brass, Nickel		
Body Plating Specification	SAE-AMS-2700			
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Nickel		
Coupling Nut Plating Specification	SAE-AMS-2700			

Mechanical Specification Notes:

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

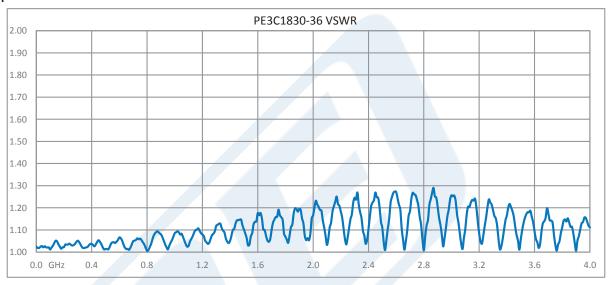




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#### **Typical Performance Data**



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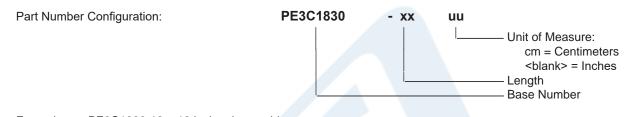




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PE3C1830-48

#### **How to Order**



Example: PE3C1830-12 = 12 inches long cable PE3C1830-100cm = 100 cm long cable

SMA Male to BNC Male Cable 48 Inch Length Using LMR-240 Coax 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: SMA Male to BNC Male Cable 48 Inch Length Using LMR-240 Coax PE3C1830-48

URL: https://www.pasternack.com/sma-male-bnc-male-Imr240-cable-assembly-pe3c1830-48-p.aspx

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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PE3C1830-48 CAD Drawing
SMA Male to BNC Male Cable 48 Inch Length Using LMR-240 Coax

