



SMA Male to QD SMA Male Precision Cable 24 Inch Length Using PE-P141 Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

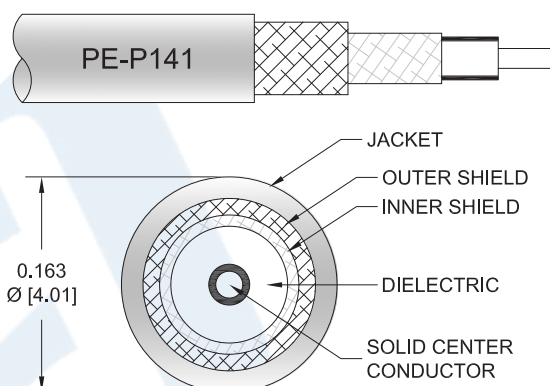
PE312-24

Configuration

- Connector 1: SMA Male
- Connector 2: QDSMA Male
- Cable Type: PE-P141

Features

- Max Frequency 18 GHz
- 70% Phase Velocity
- Triple Shielded
- FEP Jacket
- 500 Mating Cycles
- 160 series, PE-P141 Spiral Strip flexible coax



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE312-24 SMA male to SMA male QD 24 inch cable using PE-P141 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 PE-P141 coax. The PE312-24 SMA male to SMA male cable assembly operates to 18 GHz. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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 QD SMA Male Precision Cable 24 Inch Length Using PE-P141 Coax , LF Solder PE312-24](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.33:1	
Return Loss			17	dB
Velocity of Propagation		70		%
Dielectric Withstanding Voltage (AC)			1,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	2	6	8	18		GHz
Insertion Loss (Typ.)	0.17	0.42	0.48	0.76		dB
VSWR (Max.)	1.09:1	1.12:1	1.12:1	1.33:1		
Return Loss (Max.)	27	25	25	17		dB

Electrical Specification Notes:

Insertion loss does not include the loss of the connectors.

Insertion loss is estimated as $0.05 \times \sqrt{f(\text{GHz})}$ dB per connector.

Short lengths up to 24" long may exhibit VSWR measurements up to 9% higher.

Amplitude variation not to exceed 10% in a coiled vs uncoiled, a coil is defined as a 4% loop.

Mechanical Specifications

Cable Assembly

Length*	24 in [609.6 mm]
Diameter	0.17 in [4.32 mm]
Weight	0.081 lbs [36.74 g]

Cable

Cable Type	PE-P141
Impedance	50 Ohms
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Mylar Tape
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.163 in [4.14 mm]

One Time Minimum Bend Radius	1 in [25.4 mm]
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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Connection Method		QD
Mating Cycles	500	500
Contact Material and Plating	Gold	Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Gold
Body Material and Plating	Gold	Gold
Coupling Nut Material and Plating	Passivated Stainless Steel	
Hex Size	5/16 in.	
Torque	8 in-lbs [0.9 Nm]	

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE312

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE312-12 = 12 inches long cable
PE312-100cm = 100 cm long cable

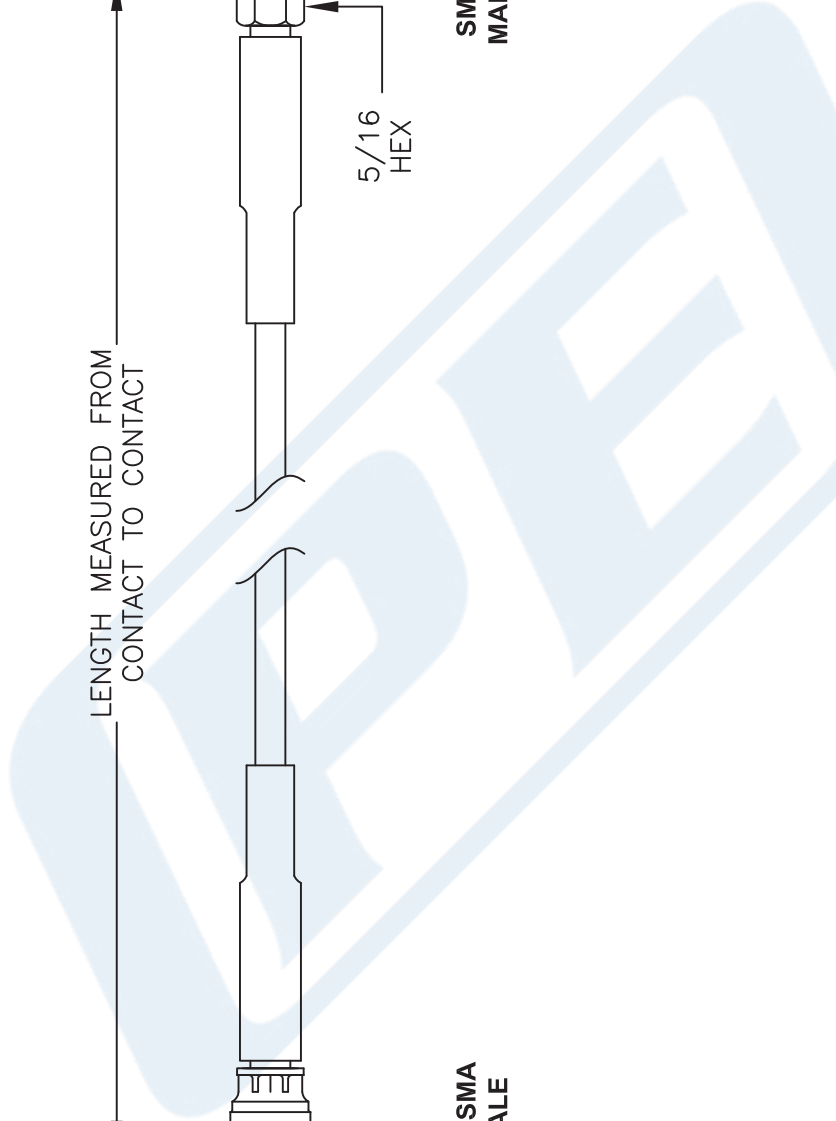
SMA Male to QD SMA Male Precision Cable 24 Inch Length Using PE-P141 Coax , LF Solder from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.


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 QD SMA Male Precision Cable 24 Inch Length Using PE-P141 Coax , LF Solder PE312-24](https://www.pasternack.com/sma-male-sma-male-300-series-cable-assembly-pe312-24-p.aspx)

URL: <https://www.pasternack.com/sma-male-sma-male-300-series-cable-assembly-pe312-24-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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 <p>PASTERNAK® Pastermack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com</p>		<p>DWG TITLE</p> <p>PE312</p>		<p>NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (mm). 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGES. 3. DIMENSIONS ARE IN INCHES (mm). 4. LENGTH TOLERANCE IS $\pm 1.5\%$ OR $3/8"$, WHICHEVER IS GREATER.</p>	
		<p>FSCM NO. 53919</p>		<p>CAD FILE 101111</p>	

DWG TITLE
PE3

PE PASTERNAK®
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com