



## SMA Female to SMA Female Cable Using PE-P141 Coax

### RF Cable Assemblies Technical Data Sheet

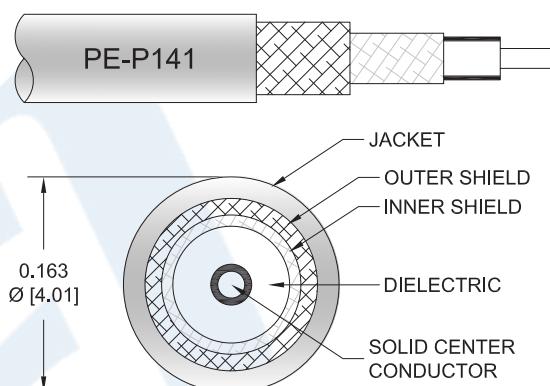
PE3C1638

#### Configuration

- Connector 1: SMA Female
- Connector 2: SMA Female
- Cable Type: PE-P141

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1638 SMA female to SMA female 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 female to female gender configuration with 50 ohm flexible PE-P141 coax. The PE3C1638 SMA female to SMA female cable assembly operates to 18 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 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 Female to SMA Female Cable Using PE-P141 Coax PE3C1638](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.112 0.37	0.165 0.54	0.255 0.84	0.382 1.25	0.58 1.9	dB

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.1 \cdot \sqrt{F(\text{GHz})}$  dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Length*	0 in [0 mm]
Weight	0.02 lbs [9.07 g]

##### Cable

Cable Type	PE-P141
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.163 in [4.14 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Impedance	50 Ohms	50 Ohms
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

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

#### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

#### How to Order

Part Number Configuration:

**PE3C1638**

- xx

uu

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

Example: PE3C1638-12 = 12 inches long cable  
PE3C1638-100cm = 100 cm long cable

SMA Female to SMA Female Cable Using PE-P141 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.

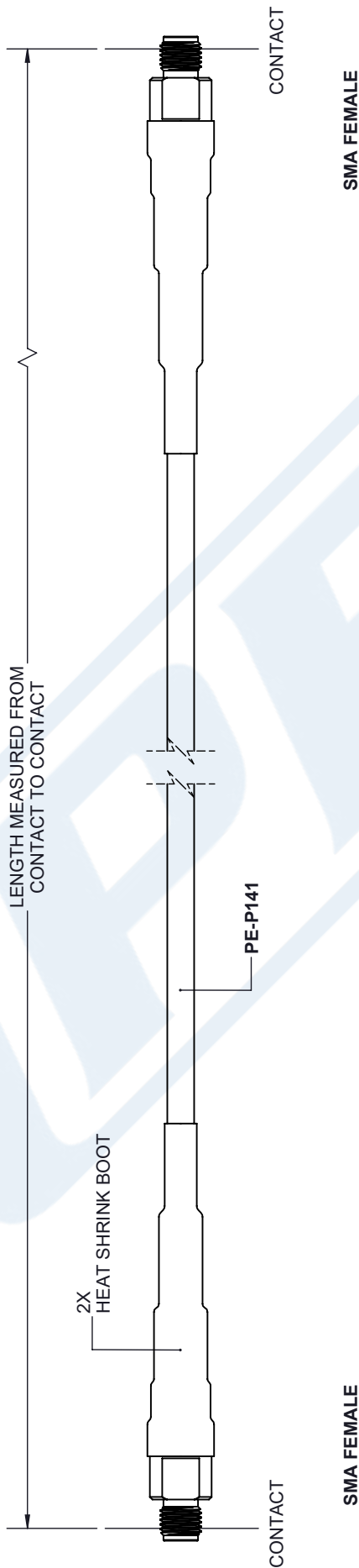
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URL: <https://www.pasternack.com/sma-female-to-sma-female-cable-using-pe-p141-pe3c1638-p.aspx>

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.

PE3C1638 CAD Drawing  
SMA Female to SMA Female Cable Using PE-P141 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/5/2021	A. GANWANI




UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:	
X = ± 2	[.008]
.XX = ± .02	[.51]
.XXX = ± .005	[.13]
ANGLES ± 1°	
CABLE LENGTH (L) TOLERANCES:	
L ≤ 12	[305] = +1 [25] / -0
12 [305] < L ≤ 60	[1524] = +2 [51] / -0
60 [1524] < L ≤ 120	[3048] = +4 [102] / -0
120 [3048] < L ≤ 300	[7620] = +6 [152] / -0
300 [7620] < L	= +5% / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

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Pasternack Enterprises, Inc.  
P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: [www.pasternack.com](http://www.pasternack.com)  
E-mail: [sales@pasternack.com](mailto:sales@pasternack.com)

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3C1638

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SHEET	1	OF	1
SCALE	N/A		
REV	A		