



# **RF Cable Assemblies Technical Data Sheet**

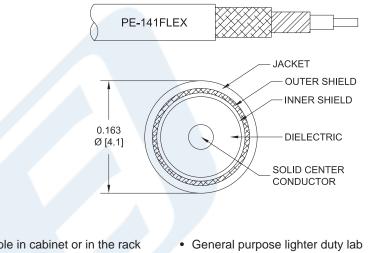
## PE3CA1050-12

### Configuration

- Connector 1: N Female Bulkhead
- Connector 2: N Male
- Cable Type: PE-141FLEX

### Features

- Design operates to 18 GHz
- Shielding effectivity > 90dB
- One time minimum bend radius: 0.4 inch
- Typical N Type VSWR 1.31:1 to 18 GHz



## Applications

- · High Performance RF equipment interconnect
- Flexible in cabinet or in the rack requirements Inside the box RF routing
- use

### Description

These new high performance flexible cables are made using our PE-141FLEX coax and our new low profile connectors. The high performance flexible design is well suited for connecting RF devices in rack-mount systems, inside RF equipment and for general lab hookup where a more expensive test cable is not required. These cables are similar to the PE30X series which have retractable coupling nuts and thick wall SMA connectors. The heavier duty PE35X test series cables have similar performance, but include a heavy duty strain relief mechanism and extra booting material as well as a thick wall SMA connector to increase the ruggedness of the PE35X cables for use in more demanding test environments.

PE-141FLEX is a flexible cable alternate to Semi Rigid coax and has a solid PTFE resulting in a 69.5% phase velocity. The smooth wall formed by the Braid over Spiral Ribbon design allows for a flexible cable that has similar performance to a solid wall 141 Semi Rigid (RG402) cable.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss	-15.56			dB
Velocity of Propagation		69.5		%
RF Shielding	90			dB
Group Delay		1.44 [4.72]		ns/ft [ns/m]
Capacitance		29.4 [96.46]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: N Female Bulkhead to N Male Cable 12 Inch Length Using PE-141FLEX Coax, RoHS PE3CA1050-12

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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Watts

perating Voltage (AC)					335	Vrms
Specifications by Freq	uency					
Description	F1	F2	F3	F4	F5	Units
Description Frequency	F1 3	<b>F2</b>	<b>F3</b> 12	F4 18	F5	Units GHz
					F5	

105

150

215

### **Mechanical Specifications**

Power Handling (Max.)

Cable Assembly Length

Weight

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

#### 12 in [304.8 mm]

88

0.19 lbs [86.18 g]

PE-141FLEX 50 Ohms Solid Copper Clad Steel, Silver PTFE 2 Silver Plated Copper Tape Silver Plated Copper Braid FEP 0.163 in [4.14 mm]

0.39 in [9.91 mm] 1.57 in [39.88 mm]

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#### Connectors

Description	Connector 1	Connector 2	
Туре	N Female Bulkhead	N Male	
Impedance	50 Ohms	50 Ohms	
Mating Cycles	500	500	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold	
Dielectric Type	PTFE	PTFE	
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel	
Hex Size		3/4 Inch	
Body Material and Plating	Brass, Nickel	Brass, Nickel	

### **Environmental Specifications**

Temperature	
Operating Range	

-40 to	+150	deg	С
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 Compliance Certifications (visit www.Pasternack.com for current document)

 RoHS Compliant
 Yes

 REACH Compliant
 12/17/2015

#### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

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#### **Typical Performance Data PE3CA1050-100CM VSWR** 1.5 – – Maximum Typical 1.4 1.3 VSWR, dB 1.2 1.1 1 0 5 8 9 10 11 12 13 14 15 16 17 18 Frequency (GHz) PE3CA1050-100CM Insertion Loss (dB) 1 --- Maximum Typical 0 **dB** -1 -2 -3 0 9 11 12 13 15 17 18 1 2 3 4 5 6 7 8 10 14 16 Frequency (GHz)

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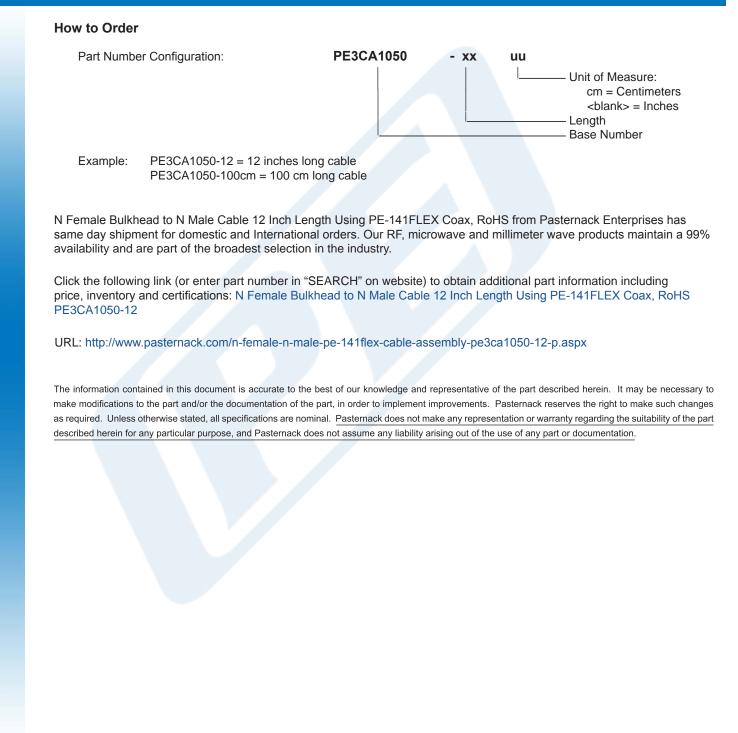
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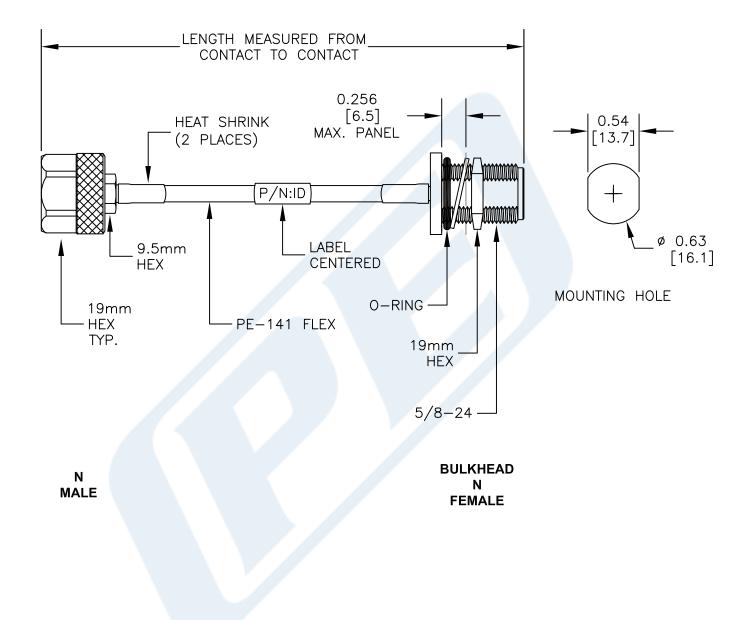


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<b>PEP PASTERNACK</b> <sup>*</sup> THE ENGINEER'S RF SOURCE	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm]. 4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.					
Pasternack Enterprises, Inc. P.O. Box 16759   Irvine   CA   92623	DWG TITLE		ESCI	FSCM NO. 53919		
Phone: (949) 261-1920   Fax: (949) 261-7451 Website: www.pasternack.com   E-Mail: sales@pasternack.com	PE3CA1050			5919		
website: www.pasternack.com   E-waii: sales@pasternack.com	CAD FILE	032715	SCALE N/A	SIZE A	150	
	CAD FILL	032713	JUALL NA	512L A	150	