



## **RF Cable Assemblies Technical Data Sheet**

#### PE3CA1044

## Configuration

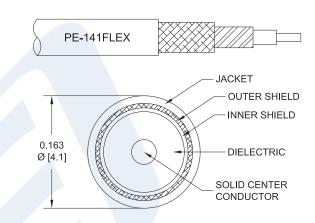
• Connector 1: TNC Male

• Connector 2: TNC Male Right Angle

• Cable Type: PE-141FLEX

#### **Features**

- Design operates to 18 GHz
- Shielding effectivity > 90dB
- One time minimum bend radius: 0.4 inch
- Typical TNC 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

 General purpose lighter duty lab 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			1.45:1	
Return Loss	14.72			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: TNC Male to TNC Male Right Angle Cable Using PE-141FLEX Coax, RoHS PE3CA1044

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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Operating Voltage (AC)	335	Vrms

### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	3	6	12	18		GHz
Insertion Loss (Max.)	0.55	0.8	1.15	1.45		dB/ft
	[1.80]	[2.62]	[3.77]	[4.76]		[dB/m]
VSWR (Max.)	1.2:1	1.3:1	1.45:1	1.45:1		
Power Handling (Max.)	215	150	105	88		Watts

### **Mechanical Specifications**

#### **Cable Assembly**

#### Cable

Cable Type Impedance

Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2

Outer Conductor 1 Material and Plating Outer Conductor 2 Material and Plating

Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

PE-141FLEX 50 Ohms Solid

Copper Clad Steel, Silver

PTFE

Silver Plated Copper Tape Silver Plated Copper Braid Silver Plated Copper Tape Silver Plated Copper Braid

FEP

0.163 in [4.14 mm]

0.4 in [10.16 mm] 1.58 in [40.13 mm]

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#### **Connectors**

Connector 1	Connector 2 TNC Male Right Angle	
TNC Male		
50 Ohms	50 Ohms	
500	500	
Beryllium Copper, Gold	Beryllium Copper, Gold	
PTFE	PTFE	
Brass, Nickel	Brass, Nickel	
9/16 Inch	9/16 Inch	
Brass, Nickel	Brass, Nickel	
	TNC Male 50 Ohms 500 Beryllium Copper, Gold PTFE Brass, Nickel 9/16 Inch	

### **Environmental Specifications**

Temperature

Operating Range -40 to +150 deg C

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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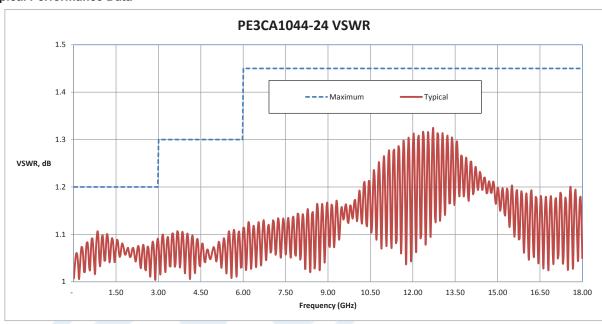


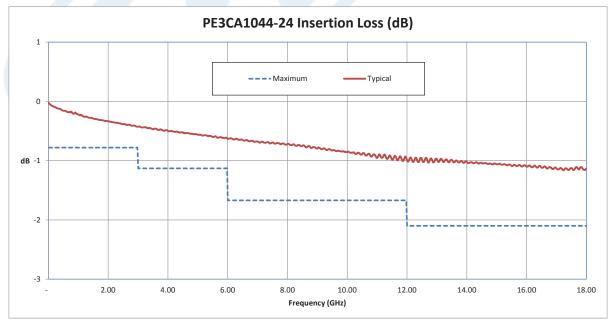


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#### **Typical Performance Data**





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#### How to Order



Example: PE3CA1044-12 = 12 inches long cable

PE3CA1044-100cm = 100 cm long cable

TNC Male to TNC Male Right Angle Cable Using PE-141FLEX Coax, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/tnc-male-tnc-male-pe-141flex-cable-assembly-pe3ca1044-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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PE3CA1044 CAD Drawing
TNC Male to TNC Male Right Angle Cable Using PE-141FLEX Coax, RoHS

