



# **RF Cable Assemblies Technical Data Sheet**

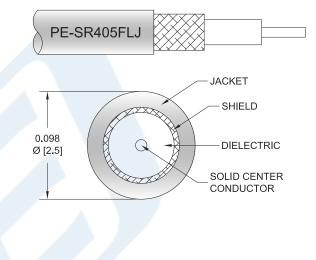
### PE3W03175-100CM

### Configuration

- Connector 1: TNC Female Bulkhead
- Connector 2: SMA Male Right Angle
- Cable Type: PE-SR405FLJ

### **Features**

- Max Frequency 3 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket



### **Applications**

General Purpose

Laboratory Use

#### Description

Pasternack's PE3W03175-100CM TNC female bulkhead to SMA male right angle 100 cm cable using PE-SR405FLJ coax is part of our full line of RF components available for same-day shipping. Pasternack's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. This Pasternack TNC to SMA cable assembly has a female to male gender configuration with 50 ohm formable PE-SR405FLJ coax. The PE3W03175-100CM TNC female to SMA male cable assembly operates to 3 GHz. The right angle SMA interface on the PE-SR405FLJ cable allows for easier connections in tight spaces. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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: TNC Female Bulkhead to SMA Male Right Angle Cable 100 cm Using PE-SR405FLJ Coax PE3W03175-100CM

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

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#### **Electrical Specifications**

Description		Minimum	Ту	/pical	Maximum	Units
Frequency Range		DC			3	GHz
VSWR					1.6:1	
Velocity of Propagation				69.5		%
RF Shielding		100				dB
Group Delay			1.4	43 [4.69]		ns/ft [ns/m]
Capacitance			29	9 [95.14]		pF/ft [pF/m]
DC Resistance Inner Condu	ctor		65.7	7 [215.55]		Ω/1000ft [Ω/Km
DC Resistance Outer Condu	uctor		10.	2 [33.46]		Ω/1000ft [Ω/Km
Specifications by Fre	quency					
Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	3		GHz
Insertion Loss (Max.)	0.8	1.04	1.44	1.574		dB

#### **Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.1 dB per TNC female bulkhead connector and 0.2 dB per SMA male right angle connector.

#### **Mechanical Specifications**

<b>Cable Assembl</b>	У
Length*	

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Outer Conductor Material and Plating Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

39.37 in [100 cm]

PE-SR405FLJ 50 Ohms Solid Copper Clad Steel, Silver PTFE 1 Tinned Copper Composite Braid FEP, Black 0.105 in [2.67 mm]

0.5 in [12.7 mm] 0.787 in [19.99 mm]

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#### Connectors

Description	Connector 1	Connector 2	
Туре	TNC Female Bulkhead	SMA Male Right Angle	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Gold	Brass, Gold over Nickel	
Contact Plating Specification		0.2 µin minimum	
Dielectric Type	PTFE	PTFE	
Outer Conductor Material and Plating	Brass, Gold	Brass, Gold over Nickel	
Outer Conductor Plating Specification		0.1 µin minimum	
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel	
Body Plating Specification		0.1 µin minimum	
Coupling Nut Material and Plating		Passivated Stainless Steel	
Hex Size		5/16 inch	
Torque		8 in-lbs [0.9 Nm]	

Compliance Certifications (see product page for current document)

Plotted and Other Data Notes:

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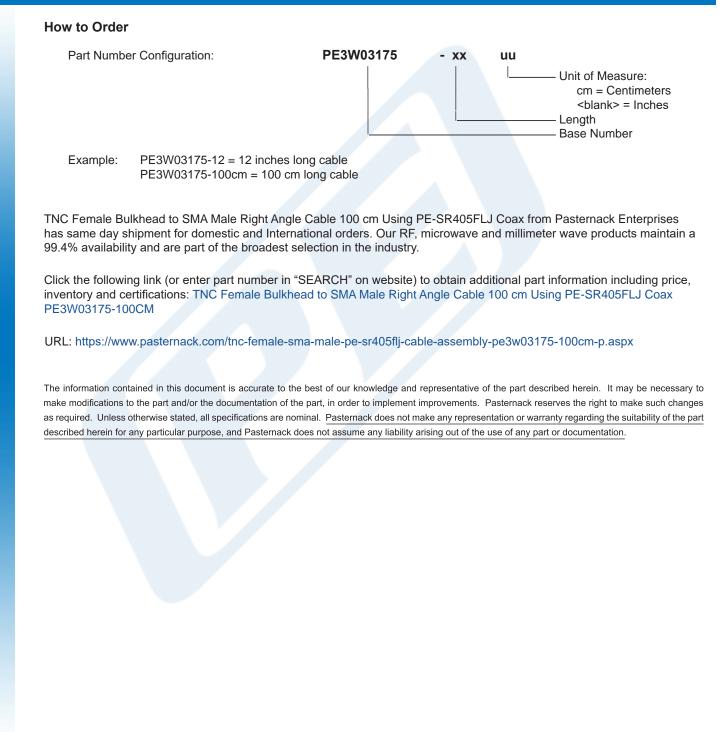
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PE3W03175-100CM CAD Drawing TNC Female Bulkhead to SMA Male Right Angle Cable 100 cm Using PE-SR405FLJ Coax

