

TNC Female Bulkhead to SMA Male Right Angle  
Cable 12 Inch Using PE-SR405FLJ Coax



RF Cable Assemblies Technical Data Sheet

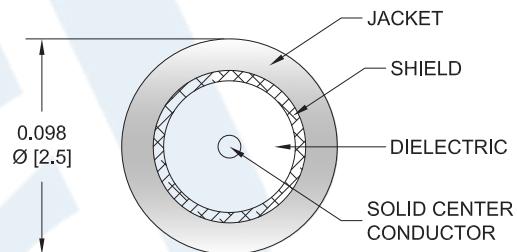
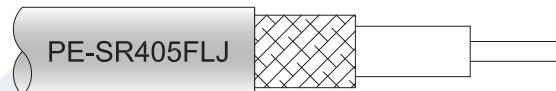
PE3W03175-12

**Configuration**

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

**Features**

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



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W03175-12 TNC female bulkhead to SMA male right angle 12 inch 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 PE3W03175-12 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 12 Inch Using PE-SR405FLJ Coax PE3W03175-12](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.6:1	
Velocity of Propagation		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ω/1000ft [Ω/Km]

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	3		GHz
Insertion Loss (Max.)	0.45	0.53	0.65	0.69		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

##### Cable Assembly

Length\*

12 in [304.8 mm]

##### Cable

Cable Type

PE-SR405FLJ

Impedance

50 Ohms

Inner Conductor Type

Solid

Inner Conductor Material and Plating

Copper Clad Steel, Silver

Dielectric Type

PTFE

Number of Shields

1

Outer Conductor Material and Plating

Tinned Copper Composite Braid

Jacket Material

FEP, Black

Jacket Diameter

0.105 in [2.67 mm]

One Time Minimum Bend Radius

0.5 in [12.7 mm]

Repeated Minimum Bend Radius

0.787 in [19.99 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	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 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	Brass, Gold over Nickel
Outer Conductor Plating Specification		0.1 $\mu$ in minimum
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel
Body Plating Specification		0.1 $\mu$ in 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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PE3W03175-12

**How to Order**

Part Number Configuration:

**PE3W03175**

- **xx**

**uu**

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

Example: PE3W03175-12 = 12 inches long cable  
PE3W03175-100cm = 100 cm long cable

TNC Female Bulkhead to SMA Male Right Angle Cable 12 Inch Using PE-SR405FLJ 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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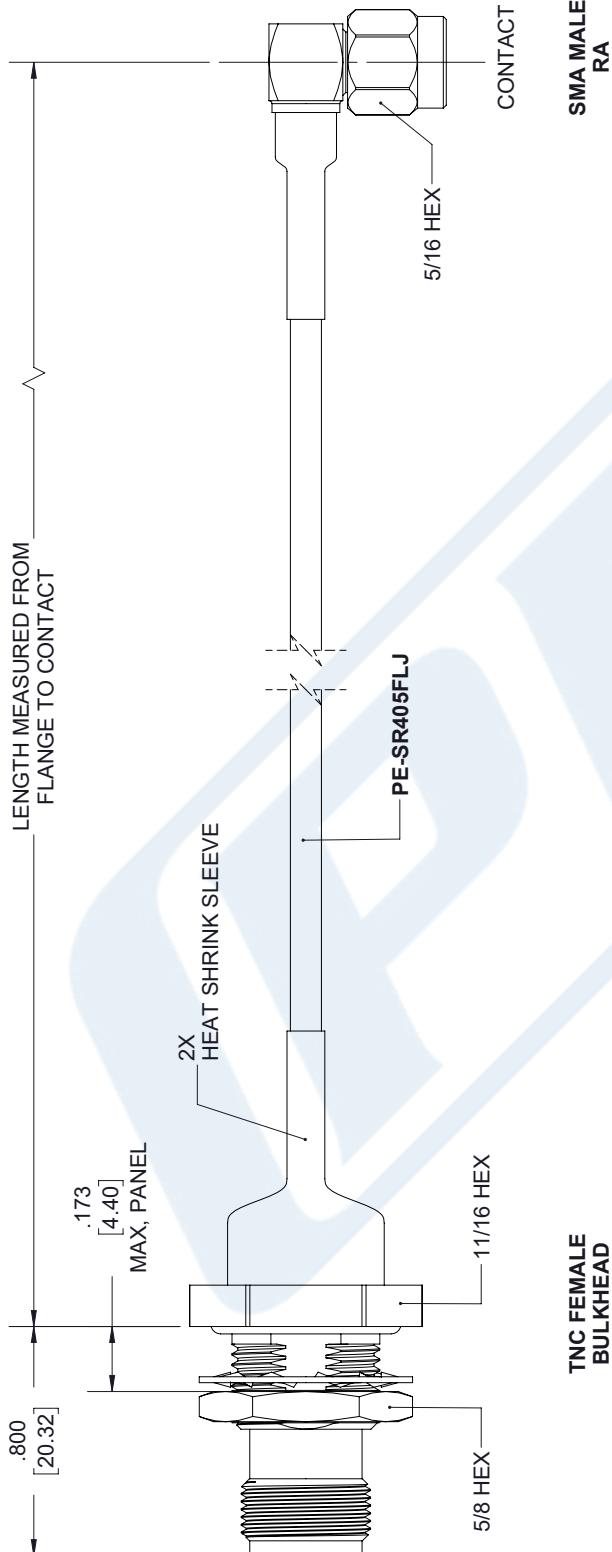
URL: <https://www.pasternack.com/tnc-female-sma-male-pe-sr405flj-cable-assembly-pe3w03175-12-p.aspx>

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.

# PE3W03175-12 CAD Drawing

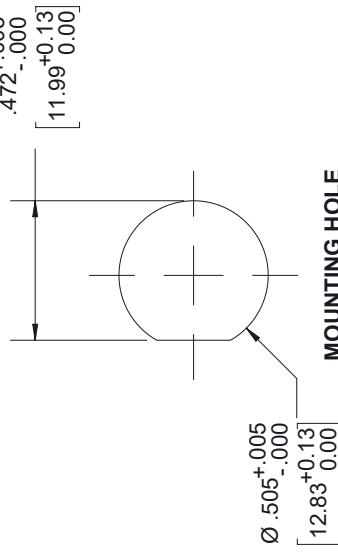
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REVISIONS					
REV.	DESCRIPTION	DATE	APPROVED		
A	INITIAL RELEASE	1/20/2020	S.ELLIS		



TNC FEMALE  
BULKHEAD

PE3W03175-12 REV 1.1



1 MOUNTING HOLE

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS TOLERANCES:		THIRD-ANGLE PROJECTION
$X = \pm 2$ [5.08] $XXX = \pm .02$ [.51] $XXX = \pm .005$ [.13]		FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$
CABLE LENGTH (L) TOLERANCES:		
$L \leq 12$ [305] = $+1 [25]$ / -0 $12 [305] < L \leq 60 [1524] = +2 [51] / -0$ $60 [1524] < L \leq 120 [3048] = +4 [102] / -0$ $120 [3048] < L \leq 300 [7620] = +6 [153] / -0$ $300 [7620] < L = +5\% L / -0$		
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		
THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.		
PE3W03175	ITEM NO.	REV
A	K.DANG	A
53919	SCALE	N/A
	OF	1
	SHEET	1
	PASTERNACK	
	an INFINITE brand	
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