



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

RF Cable Assemblies Technical Data Sheet

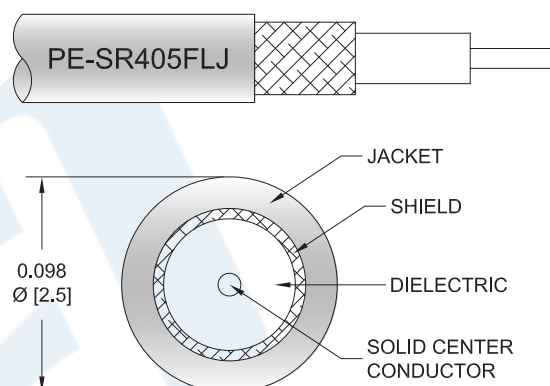
PE3W07181-12

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W07181-12 SMA male to TNC 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm formable PE-SR405FLJ coax. The PE3W07181-12 SMA male to TNC male cable assembly operates to 6 GHz. The right angle TNC interface on the PE-SR405FLJ cable allows for easier connections in tight spaces.

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 Male to TNC Male Right Angle Cable 12 Inch Length Using PE-SR405FLJ Coax PE3W07181-12](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|---------------|---------|-----------------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.5:1 | |
| 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 | 4 | 6 | GHz |
| Insertion Loss (Max.) | 0.45 | 0.53 | 0.56 | 0.7 | 0.84 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax use in this assembly. The Insertion Loss includes an estimated insertion loss of 0.3dB of connector Loss

Mechanical Specifications

Cable Assembly

| | |
|----------|---------------------|
| Length* | 12 in [304.8 mm] |
| Diameter | 0.591 in [15.01 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 | SMA Male | TNC Male Right Angle |
| Specification | MIL-STD-348A | |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold over Nickel |
| Contact Plating Specification | 50µ in. minimum | |
| Dielectric Type | Teflon | PTFE |
| Body Material and Plating | Brass, Gold | Brass, Nickel |
| Body Plating Specification | 3µ in. minimum | |
| Coupling Nut Material and Plating | Brass, Gold | Brass, Nickel |
| Coupling Nut Plating Specification | 3µ in. minimum | |
| Hex Size | 5/16 Inch | |
| Torque | 3 in-lbs [0.34 Nm] | |

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8$ ", whichever is greater.

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W07181

- **xx**

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

Example: PE3W07181-12 = 12 inches long cable
PE3W07181-100cm = 100 cm long cable

SMA Male to TNC Male Right Angle Cable 12 Inch Length 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Male Right Angle Cable 12 Inch Length Using PE-SR405FLJ Coax PE3W07181-12](https://www.pasternack.com/sma-male-tnc-male-pe-sr405flj-cable-assembly-pe3w07181-12-p.aspx)

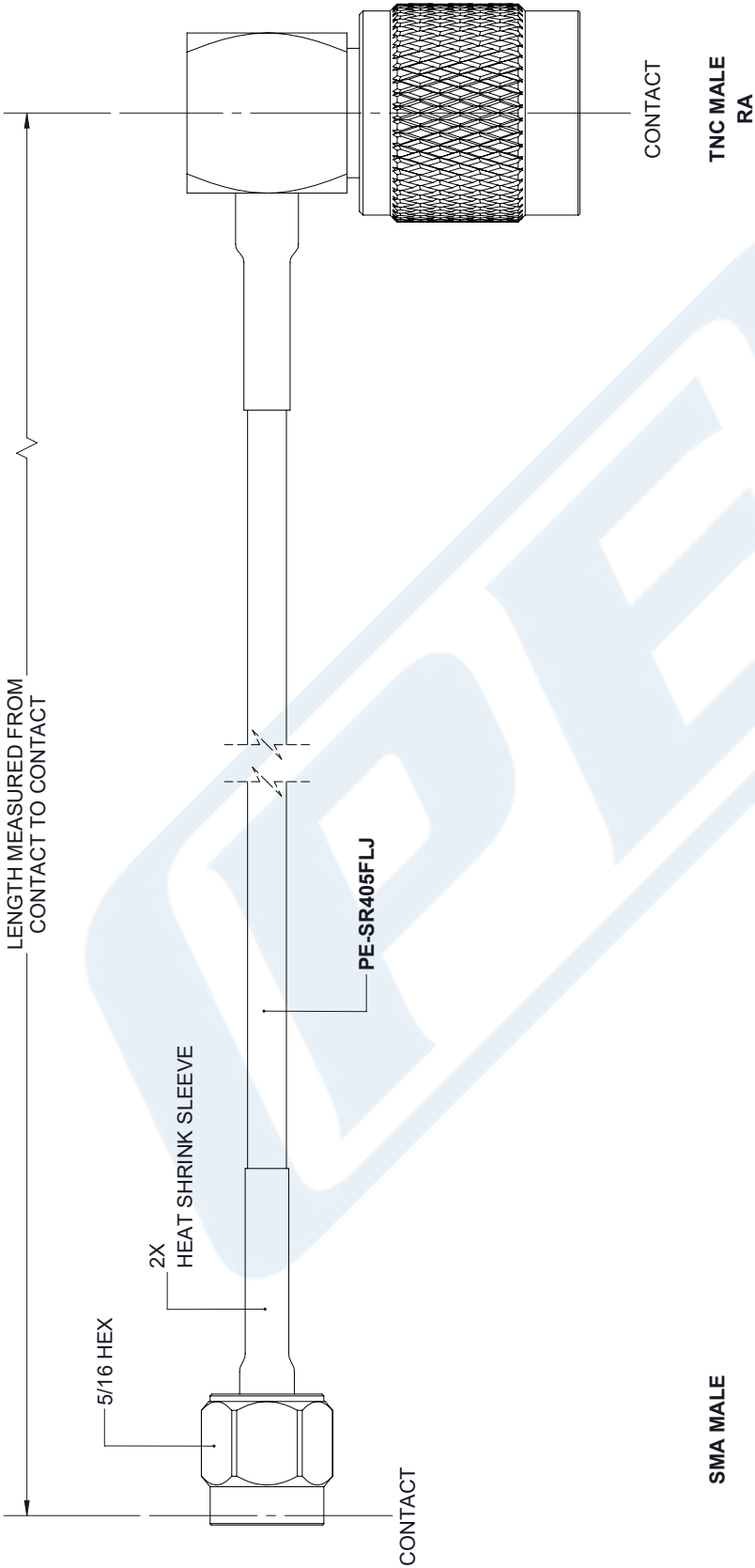
URL: <https://www.pasternack.com/sma-male-tnc-male-pe-sr405flj-cable-assembly-pe3w07181-12-p.aspx>

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PE3W07181-12 CAD Drawing

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

| REVISIONS | | | |
|-----------|---------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | PCR PE3W07181 | 3/26/2020 | S.ELLIS |



| | |
|--|-----------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | FRACTIONS |
| .X = ± .2 | [5.08] |
| .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%L / -0 | |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | |

| | |
|---|-----------|
| PE PASTERNAK an INFINITI brand | |
| 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 E-mail: sales@pasternack.com | |
| SIZE | ITEM NO. |
| A | 53919 |
| DRAWN BY | K.DANG |
| REV | PE3W07181 |
| SCALE | N/A |
| SHEET | 1 OF 1 |

| | |
|---|--|
| THIRD-ANGLE PROJECTION | |
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