



SMA Male to QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS

TECHNICAL DATA SHEET

PE312-48

**SMA Male to QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS**

**Configuration**

|                           |             |
|---------------------------|-------------|
| Connector 1               | SMA Male    |
| Connector 1 Specification | MIL-STD-348 |
| Connector 2               | SMA Male    |
| Cable Type                | 160 Series  |

**Electrical Specifications**

|  |          |
|--|----------|
| Frequency Range, GHz                       | DC to 18 |
| Impedance, Ohms                            | 50       |
| Maximum VSWR                               | 1.33:1   |
| Velocity of Propagation, %                 | 70       |
| Dielectric Withstanding Voltage (AC), Vrms | 1,000    |

**Typical Performance by Frequency**

**Frequency 1**

|                 |                          |
|-----------------|--------------------------|
| Frequency, GHz  | 2                        |
| VSWR            | 1.09:1                   |
| Return Loss, dB | 27                       |
| Insertion Loss  | 0.17 dB/ft [ 0.56 dB/m ] |

**Frequency 2**

|                 |                          |
|-----------------|--------------------------|
| Frequency, GHz  | 6                        |
| VSWR            | 1.12:1                   |
| Return Loss, dB | 25                       |
| Insertion Loss  | 0.42 dB/ft [ 1.38 dB/m ] |

**Frequency 3**

|                 |                          |
|-----------------|--------------------------|
| Frequency, GHz  | 8                        |
| VSWR            | 1.12:1                   |
| Return Loss, dB | 25                       |
| Insertion Loss  | 0.48 dB/ft [ 1.57 dB/m ] |

**Frequency 4**

|                 |                          |
|-----------------|--------------------------|
| Frequency, GHz  | 18                       |
| VSWR            | 1.33:1                   |
| Return Loss, dB | 17                       |
| Insertion Loss  | 0.76 dB/ft [ 2.49 dB/m ] |

**Mechanical Specifications**

**Cable Assembly**

|            |            |
|------------|------------|
| Cable Type | 160 Series |
|------------|------------|

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 QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS PE312-48](#)

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.





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#### Temperature

Temperature Operating Range, deg C -55 to +125

#### Size

Length, in [cm] 48 [121.92]  
 Diameter, in [mm] 0.17 [4.32]  
 Weight, lbs [g] 0.038 [17.24]  
 Cable Color Blue  
 One Time Minimum Bend Radius, in [mm] 1 [25.4]

#### Cable

No of Shields 3  
 Dielectric Type PTFE  
 Jacket Material FEP  
 Jacket Diameter, in [mm] 0.163 [4.14]

#### Connector 1

Type SMA Male  
 Configuration Straight  
 Inner Conductor Material and Plating Gold  
 Coupling Nut Material and Plating Passivated Stainless Steel  
 Hex Size, in. 5/16  
 Torque, in-lbs [Nm] 8 [0.9]  
 Body Material and Plating Gold  
 Dielectric Type PTFE

#### Connector 2

Type SMA Male  
 Configuration Straight  
 Inner Conductor Material and Plating Gold  
 Outer Conductor Material and Plating Gold  
 Body Material and Plating Gold  
 Dielectric Type PTFE

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)  
 RoHS Compliant Yes

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**Plotted and Other Data**

Notes:

Values at 25 °C, sea level

SMA Male to QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

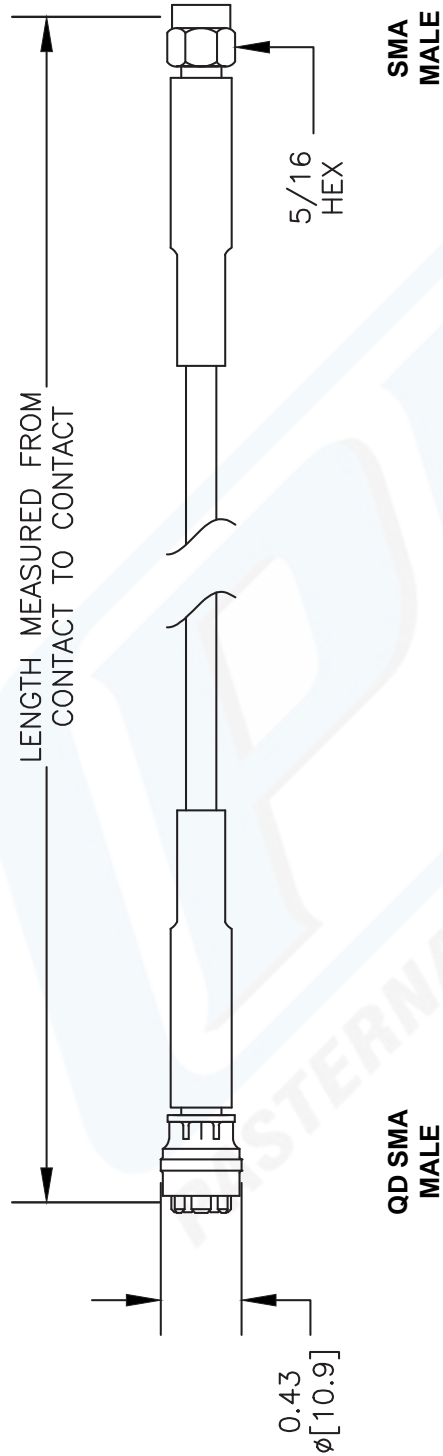
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS PE312-48](http://www.pasternack.com/sma-male-sma-male-300-series-cable-assembly-pe312-48-p.aspx)

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# PE312-48 CAD Drawing

SMA Male to QD SMA Male Precision Cable 48 Inch Length Using 160 Series Coax, RoHS



| How To Order   |  | Part # Ext. | Length In Inches | Part # Ext. | Length In Centimeters |
|--|--|-------------|------------------|-------------|-----------------------|
| <b>Part Number Configuration</b><br>PE3 [ZZ] [YY] - [XX] [UU]<br>00 - 99999<br>LF = RoHS Compliant<br>< Blank > = Standard<br>Note: LF applies only to RF cables |  | -12         | 12"              | -25CM       | 25Cm                  |
| <b>Examples</b><br>PE3000LF-100<br>PE3000-100<br>PE3000LF-100CM<br>PE3000-100CM  |  | -24         | 24"              | -50CM       | 50Cm                  |
| CM = Centimeters<br>< Blank > = Inches<br>_____ Length   |  | -36         | 36"              | -75CM       | 75Cm                  |
|  |  | -48         | 48"              | -100CM      | 100Cm                 |
|  |  | -60         | 60"              | -125CM      | 125Cm                 |
|  |  | -XX         | Custom Length    | -XXCM       | Custom Length         |

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.

DWG TITLE  
**PE312**

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|                |                 |           |        |      |
|----------------|-----------------|-----------|--------|------|
| FSCM NO. 53919 | CAD FILE 101111 | SCALE N/A | SIZE A | 2233 |
|----------------|-----------------|-----------|--------|------|