



SMA Male to QMA Male Low Loss Cable  
60 Inch Length Using LMR-100 Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3W09880-60**

**Configuration**

- Connector 1: SMA Male
- Connector 2: QMA Male
- Cable Type: LMR-100A

**Features**

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

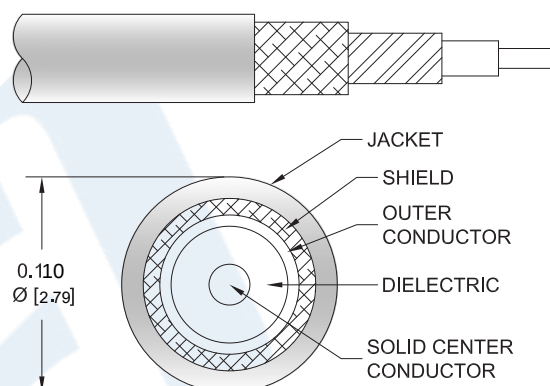
**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W09880-60 SMA male to QMA male 60 inch cable using LMR-100 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to QMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W09880-60 SMA male to QMA male cable assembly operates to 5.8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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 QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax PE3W09880-60](#)



## SMA Male to QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3W09880-60**

#### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units           |
|-------------------------------|---------|---------------|---------|-----------------|
| Frequency Range               | DC      |               | 5.8     | GHz             |
| VSWR                          |         |               | 1.45:1  |                 |
| Velocity of Propagation       |         | 66            |         | %               |
| RF Shielding                  | 90      |               |         | dB              |
| Group Delay                   |         | 1.54 [5.05]   |         | ns/ft [ns/m]    |
| Capacitance                   |         | 30.8 [101.05] |         | pF/ft [pF/m]    |
| Inductance                    |         | 0.077 [0.25]  |         | uH/ft [uH/m]    |
| DC Resistance Inner Conductor |         | 81 [265.75]   |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 9.5 [31.17]   |         | Ω/1000ft [Ω/Km] |
| Jacket Spark                  |         |               | 2,000   | Vrms            |

#### Specifications by Frequency

| Description           | F1   | F2   | F3  | F4  | F5  | Units |
|-----------------------|------|------|-----|-----|-----|-------|
| Frequency             | 0.25 | 0.5  | 1   | 2.5 | 5.8 | GHz   |
| Insertion Loss (Typ.) | 0.8  | 1.05 | 1.4 | 2.2 | 3.4 | 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 includes an estimated insertion loss of 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Length\* 60 in [152.4 cm]

##### Cable

Cable Type LMR-100A  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material PVC, Black  
 Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

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 QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax PE3W09880-60](#)



## SMA Male to QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax

### RF Cable Assemblies Technical Data Sheet

**PE3W09880-60**

|                              |                        |
|------------------------------|------------------------|
| Repeated Minimum Bend Radius | 1 in [25.4 mm]         |
| Bending Moment               | 0.1 lbs-ft [0.14 N-m]  |
| Flat Plate Crush             | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength             | 15 lbs [6.8 Kg]        |

#### Connectors

| Description                          | Connector 1        | Connector 2                |
|--------------------------------------|--------------------|----------------------------|
| Type                                 | SMA Male           | QMA Male                   |
| Impedance                            | 50 Ohms            | 50 Ohms                    |
| Mating Cycles                        |                    | 100                        |
| Contact Material and Plating         | Brass, Gold        | Brass, Gold                |
| Dielectric Type                      | PTFE               | PTFE                       |
| Outer Conductor Material and Plating |                    | Phosphor Bronze, Tri-Metal |
| Body Material and Plating            | Brass, Gold        | Brass, Tri-Metal           |
| Coupling Nut Material and Plating    | Brass, Gold        |                            |
| Hex Size                             | 5/16 in            |                            |
| Torque                               | 5 in-lbs [0.57 Nm] |                            |

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

#### Plotted and Other Data

Notes:

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 QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax PE3W09880-60](#)



SMA Male to QMA Male Low Loss Cable  
60 Inch Length Using LMR-100 Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3W09880-60**

**How to Order**

Part Number Configuration:

**PE3W09880**

- **xx**

**uu**

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

Example: PE3W09880-12 = 12 inches long cable  
PE3W09880-100cm = 100 cm long cable

SMA Male to QMA Male Low Loss Cable 60 Inch Length Using LMR-100 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 QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax PE3W09880-60](#)

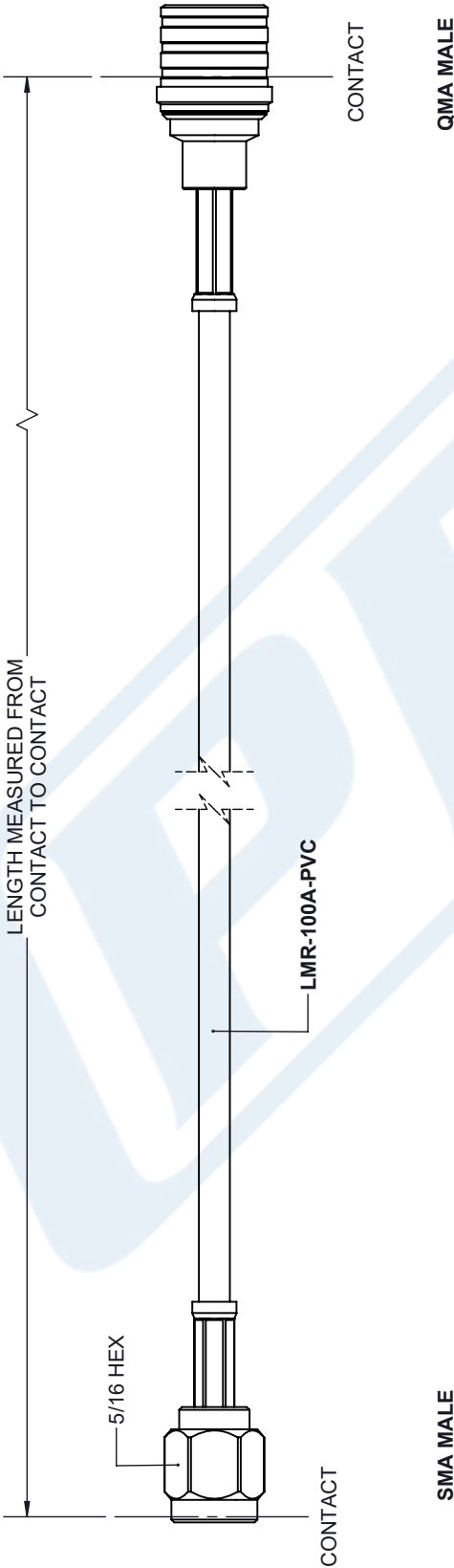
URL: <https://www.pasternack.com/sma-male-qma-male-lmr100-cable-assembly-pe3w09880-60-p.aspx>

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.

PE3W09880-60 CAD Drawing

SMA Male to QMA Male Low Loss Cable 60 Inch Length Using LMR-100 Coax

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 10/15/2020 | S. ELLIS |



UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

|               |        |             |
|---------------|--------|-------------|
| .X = ± .2     | [.008] | FRACTIONS   |
| .XX = ± .02   | [.51]  | ± 1/32      |
| .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% / -0      |

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITE 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](http://www.pasternack.com)  
E-mail: [sales@pasternack.com](mailto:sales@pasternack.com)

THIRD-ANGLE PROJECTION

THE INFORMATION AND  
DESIGN IN THIS DOCUMENT  
IS THE PROPERTY OF  
PASTERNAK CORPORATION  
ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

|        |                 |                 |                    |       |
|--------|-----------------|-----------------|--------------------|-------|
| SIZE A | CAGE CODE 53919 | DRAWN BY K.DANG | ITEM NO. PE3W09880 | REV A |
|--------|-----------------|-----------------|--------------------|-------|

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.