

Plenum QMA Male to SMA Male Low PIM Cable 60 Inch Length Using SPP-250-LLPL Coax , LF Solder



PE3C5870-60

Configuration

- Connector 1: QMA Male
- Connector 2: SMA Male
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

Features

- Max Frequency 5.8 GHz
- Low PIM: -155 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing

Description

Pasternack's PE3C5870-60 QMA male to SMA male 60 inch cable using SPP-250-LLPL coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack QMA to SMA cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C5870-60 QMA male to SMA male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -155 dBc.

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.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--|---------|---------|---------|-------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 76 | | % |
| RF Shielding | 100 | | | dB |
| Passive Intermodulation | | | -155 | dBc |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz | | | | |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------------|
| Capacitance | | 27 [88.58] | | pF/ft [pF/m] |
| Inductance | | 0.067 [0.22] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 3 [9.84] | | Ohms/1000ft [Ohms/Km] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|-----|------|-------|
| Frequency | 0.45 | 0.7 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Max.) | 0.25 | 0.31 | 0.37 | 0.6 | 0.94 | dB |

Electrical Specification Notes:

The insertion loss data above is based on the performance specifications of the coax cable used in this assembly. The insertion loss includes an estimated insertion loss of $0.04 * \text{SQRT}(\text{FGHz})$ dB maximum per connector.

Mechanical Specifications

Cable Assembly

Weight 0.41 lbs [185.97 g]

Cable

Cable Type SPP-250-LLPL
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper
 Dielectric Type PTFE
 Number of Shields 1
 Outer Conductor 1 Material and Plating Copper
 Jacket Material FEP, Blue
 Jacket Diameter 0.28 in [7.11 mm]
 One Time Minimum Bend Radius 1.25 in [31.75 mm]
 Bending Moment 0.8 lbs-ft [1.08 N-m]

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|----------------------------|------------------|
| Type | QMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Brass, Silver | Brass, Gold |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Phosphor Bronze, Tri-Metal | |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |

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Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data



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PE3C5870-60

How to Order

Part Number Configuration:

PE3C5870

- xx

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

Example: PE3C5870-12 = 12 inches long cable
PE3C5870-100cm = 100 cm long cable

Plenum QMA Male to SMA Male Low PIM Cable 60 Inch Length Using SPP-250-LLPL Coax , LF Solder 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: [Plenum QMA Male to SMA Male Low PIM Cable 60 Inch Length Using SPP-250-LLPL Coax , LF Solder PE3C5870-60](#)

URL: <https://www.pasternack.com/qma-male-sma-male-spp250llpl-cable-assembly-pe3c5870-60-p.aspx>

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C5870-60 CAD Drawing

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