

MCX Plug to SMA Male Cable Using PE-P086 Coax



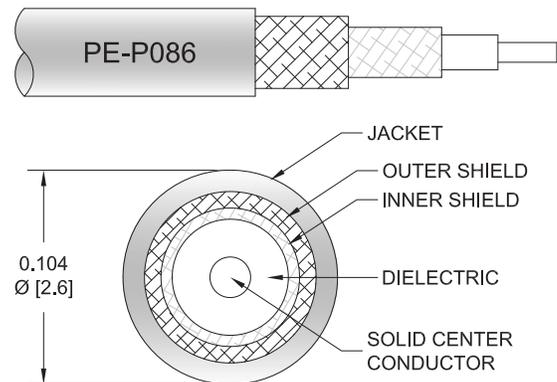
PE3C5701

Configuration

- Connector 1: MCX Plug
- Connector 2: SMA Male
- Cable Type: PE-P086
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5701 MCX plug to SMA male cable using PE-P086 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 MCX to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible PE-P086 coax. The PE3C5701 MCX plug to SMA male cable assembly operates to 6 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 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.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 110 | | | dB |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

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| Part Number | Length | Description | F1 | F2 | F3 | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|-----------|-------|-------|-------|--------------|
| | | | Frequency | 1000 | 2500 | 6000 | |
| PE3C5701 | Custom Lengths Available | Insertion Loss (Typ.) | 0.211 | 0.338 | 0.551 | dB/ft | |
| | | | 0.7 | 1.11 | 1.81 | dB/m | |
| PE3C5701-6 | 6 inch | Insertion Loss (Typ.) | 0.31 | 0.37 | 0.48 | dB | 0.016 |
| PE3C5701-12 | 12 inch | Insertion Loss (Typ.) | 0.42 | 0.54 | 0.76 | dB | 0.022 |
| PE3C5701-24 | 24 inch | Insertion Loss (Typ.) | 0.63 | 0.88 | 1.31 | dB | 0.036 |
| PE3C5701-36 | 36 inch | Insertion Loss (Typ.) | 0.84 | 1.22 | 1.86 | dB | 0.049 |
| PE3C5701-48 | 48 inch | Insertion Loss (Typ.) | 1.05 | 1.56 | 2.41 | dB | 0.062 |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

| | |
|-----------------------------|----------------|
| Loss due to Connector 1: | 0.1 dB |
| Loss due to Connector 2: | 0.1 dB |
| Base Weight: | 0.022 pounds |
| Additional Weight per Inch: | 0.00109 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|--------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.022 lbs [9.98 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | PE-P086 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Tape |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | FEP, Blue |
| Jacket Diameter | 0.104 in [2.64 mm] |
| Repeated Minimum Bend Radius | 0.5 in [12.7 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|-------------------------|----------------------------|
| Type | MCX Plug | SMA Male |
| Specification | MIL-C-39012 | |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Mating Cycles | 500 | |
| Contact Material and Plating | Brass, Gold over Nickel | Brass, Gold over Nickel |
| Contact Plating Specification | 30 µin minimum | |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Gold over Nickel | Brass, Gold over Nickel |
| Body Plating Specification | 10 µin minimum | |
| Coupling Nut Material and Plating | | Passivated Stainless Steel |
| Hex Size | | 5/16 inch |
| Torque | | 8 in-lbs 0.9 Nm |

Environmental Specifications

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

Plotted and Other Data

Notes:

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PE3C5701

Typical Performance Data

How to Order

Part Number Configuration:

PE3C5701

- **xx**

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

Example: PE3C5701-12 = 12 inches long cable
PE3C5701-100cm = 100 cm long cable

MCX Plug to SMA Male Cable Using PE-P086 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: [MCX Plug to SMA Male Cable Using PE-P086 Coax PE3C5701](#)

URL: <https://www.pasternack.com/mcx-plug-to-sma-male-cable-using-pe-p086-pe3c5701-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.

PE3C5701 CAD Drawing

MCX Plug to SMA Male Cable Using PE-P086 Coax

