

## MCX Plug Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink

### PE3C5024/HS

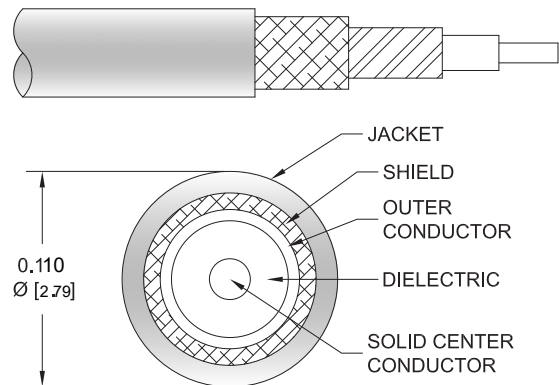


#### Configuration

- Connector 1: MCX Plug Right Angle
- Connector 2: SMA Male
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C5024/HS MCX plug right angle to SMA male 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 MCX to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3C5024/HS MCX plug to SMA male cable assembly operates to 3 GHz. The right angle MCX interface on the LMR-100A cable allows for easier connections in tight spaces. 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.

#### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units                 |
|-------------------------------|---------|---------------|---------|-----------------------|
| Frequency Range               | DC      |               | 3       | GHz                   |
| VSWR                          |         |               | 1.4:1   |                       |
| 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]   |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 9.5 [31.17]   |         | Ohms/1000ft [Ohms/Km] |

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#### Electrical Specifications

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 2,000   | Vrms  |

#### Specifications by Frequency

| Part Number       | Length                   | Description           | F1    | F2    | F3    | F4   | F5    | Units | Weight (lbs) |
|-------------------|--------------------------|-----------------------|-------|-------|-------|------|-------|-------|--------------|
|                   |                          | Frequency             | 100   | 250   | 500   | 1000 | 3000  | MHz   |              |
| PE3C5024/HS       | Custom Lengths Available | Insertion Loss (Typ.) | 0.064 | 0.115 | 0.165 | 0.24 | 0.432 | dB/ft |              |
|                   |                          |                       | 0.21  | 0.38  | 0.55  | 0.79 | 1.42  | dB/m  |              |
| PE3C5024/HS-24    | 24 Inch                  | Insertion Loss (Typ.) | 0.58  | 0.68  | 0.78  | 0.93 | 1.32  | dB    | 0.037        |
| PE3C5024/HS-36    | 36 Inch                  | Insertion Loss (Typ.) | 0.65  | 0.8   | 0.95  | 1.17 | 1.75  | dB    | 0.046        |
| PE3C5024/HS-48    | 48 Inch                  | Insertion Loss (Typ.) | 0.71  | 0.91  | 1.11  | 1.41 | 2.18  | dB    | 0.055        |
| PE3C5024/HS-100CM | 100 CM                   | Insertion Loss (Typ.) | 0.66  | 0.83  | 1     | 1.24 | 1.87  | dB    | 0.049        |
| PE3C5024/HS-200CM | 200 CM                   | Insertion Loss (Typ.) | 0.87  | 1.21  | 1.54  | 2.03 | 3.29  | dB    | 0.078        |

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:    | 0.2 dB         |
| Loss due to Connector 2:    | 0.25 dB        |
| Base Weight:                | 0.028 pounds   |
| Additional Weight per Inch: | 0.07833 pounds |

#### Mechanical Specifications

##### Cable Assembly

|                |                    |
|----------------|--------------------|
| Width/Diameter | 0.5 in [12.7 mm]   |
| Weight         | 0.028 lbs [12.7 g] |

##### 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]      |
| 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]        |

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#### Connectors

| Description                        | Connector 1          | Connector 2      |
|------------------------------------|----------------------|------------------|
| Type                               | MCX Plug Right Angle | SMA Male         |
| Specification                      | CECC 22220           |                  |
| Impedance                          | 50 Ohms              | 50 Ohms          |
| Configuration                      | Right Angle          | Straight         |
| Contact Material and Plating       | Brass, Gold          | Brass, Gold      |
| Contact Plating Specification      | 30 µin minimum       | 15 µin minimum   |
| Dielectric Type                    | PTFE                 | PTFE             |
| Body Material and Plating          | Brass, Nickel        | Brass, Nickel    |
| Body Plating Specification         | 100 µin minimum      | 200 µin minimum  |
| Coupling Nut Material and Plating  |                      | Brass, Nickel    |
| Coupling Nut Plating Specification |                      | 200 µin minimum  |
| Torque                             |                      | 7 in-lbs 0.79 Nm |

#### Environmental Specifications

Operating Range Temperature -40 to +60 deg C

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

#### Plotted and Other Data

Notes:

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### PE3C5024/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C5024/HS**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: PE3C5024/HS-12 = 12 inches long cable  
PE3C5024/HS-100cm = 100 cm long cable

MCX Plug Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink 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 Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3C5024/HS](#)

URL: <https://www.pasternack.com/mcx-plug-right-angle-to-sma-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3c5024-hs-p.aspx>

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PE3C5024/HS CAD Drawing
MCX Plug Right Angle to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink

