



SMA Male Right Angle to MCX Plug Right Angle  
Cable 150 CM Length Using RG316 Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3W10654-150CM**

**Configuration**

- Connector 1: SMA Male Right Angle
- Connector 2: MCX Plug Right Angle
- Cable Type: RG316

**Features**

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket

**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W10654-150CM SMA male right angle to MCX plug right angle 150 cm cable using RG316 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 MCX cable assembly has a male to plug gender configuration with 50 ohm flexible RG316 coax. The PE3W10654-150CM SMA male to MCX plug cable assembly operates to 3 GHz. The right angle SMA and right angle MCX interfaces on the RG316 cable allow for easier connections in tight spaces.

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 Right Angle to MCX Plug Right Angle Cable 150 CM Length Using RG316 Coax PE3W10654-150CM](#)



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### Electrical Specifications

| Description                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 3       | GHz   |
| VSWR                                 |         |         | 1.5:1   |       |
| Velocity of Propagation              |         | 69      |         | %     |
| Operating Voltage (AC)               |         |         | 250     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 2,000   | Vrms  |
| Jacket Spark                         |         |         | 2,000   | Vrms  |

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Typ.) | 0.85 | 1.09 | 1.48 | 2.17 | 3.16 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.15dB per connector loss.

### Mechanical Specifications

#### Cable Assembly

|          |                      |
|----------|----------------------|
| Length*  | 59.06 in [150.01 cm] |
| Diameter | 0.689 in [17.5 mm]   |

#### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | RG316                      |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Stranded                   |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 1                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.102 in [2.59 mm]         |

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### Connectors

| Description                       | Connector 1          | Connector 2          |
|-----------------------------------|----------------------|----------------------|
| Type                              | SMA Male Right Angle | MCX Plug Right Angle |
| Specification                     |                      | CECC 22220           |
| Impedance                         | 50 Ohms              | 50 Ohms              |
| Contact Material and Plating      | Brass, Gold          | Brass, Gold          |
| Contact Plating Specification     |                      | 30 µin minimum       |
| Dielectric Type                   | Teflon               | PTFE                 |
| Body Material and Plating         | Brass, Gold          | Brass, Nickel        |
| Body Plating Specification        |                      | 100 µin minimum      |
| Coupling Nut Material and Plating | Brass, Gold          |                      |
| Hex Size                          | 5/16 in              |                      |
| Torque                            | 5 in-lbs [0.57 Nm]   |                      |

### Environmental Specifications

#### Temperature

Operating Range

-40 to +60 deg C

**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 Right Angle to MCX Plug Right Angle Cable 150 CM Length Using RG316 Coax PE3W10654-150CM](#)



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**RF Cable Assemblies Technical Data Sheet**

**PE3W10654-150CM**

**How to Order**

Part Number Configuration:

**PE3W10654**

- **xx**

**uu**

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

Example: PE3W10654-12 = 12 inches long cable  
PE3W10654-100cm = 100 cm long cable

SMA Male Right Angle to MCX Plug Right Angle Cable 150 CM Length Using RG316 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 Right Angle to MCX Plug Right Angle Cable 150 CM Length Using RG316 Coax PE3W10654-150CM](https://www.pasternack.com/sma-male-mcx-plug-right-angle-cable-150cm-length-using-rg316-coax-pe3w10654-150cm)

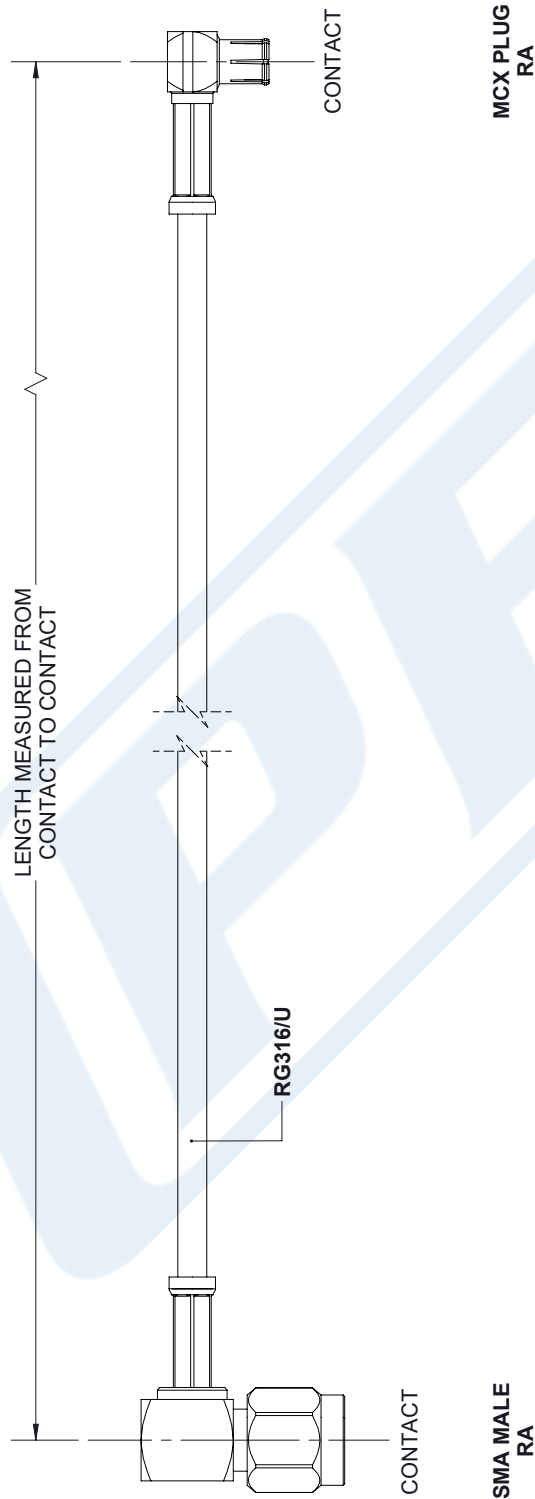
URL: <https://www.pasternack.com/sma-male-mcx-plug-rg316u-cable-assembly-pe3w10654-150cm-p.aspx>

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.

# PE3W10654-150CM CAD Drawing

SMA Male Right Angle to MCX Plug Right Angle Cable 150 CM Length Using RG316 Coax

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 4/15/2021 | SELLIS   |



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