

MCX Plug to MCX Plug Right Angle Low Loss Cable  
Using LMR-100 Coax with HeatShrink, LF Solder



**RF Cable Assemblies Technical Data Sheet**

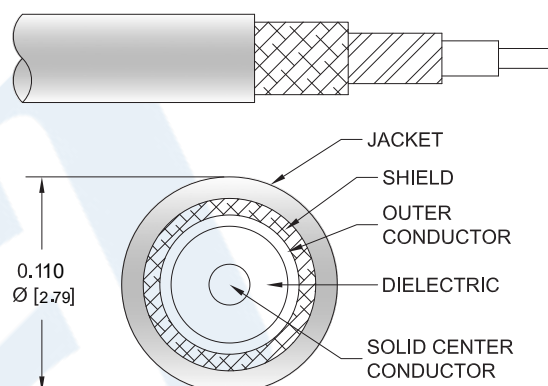
**PE3W01583LF/HS**

**Configuration**

- Connector 1: MCX Plug
- Connector 2: MCX Plug Right Angle
- Cable Type: LMR-100A

**Features**

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



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W01583LF/HS MCX plug to MCX plug right angle 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 MCX cable assembly has a plug to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3W01583LF/HS MCX plug to MCX plug 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.

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 MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder PE3W01583LF/HS](#)



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**PE3W01583LF/HS**

#### 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]   |         | 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             | 0.1  | 0.25  | 0.5   | 1    | 3     | GHz   |
| Insertion Loss (Typ.) | 0.07 | 0.115 | 0.165 | 0.24 | 0.434 | dB/ft |
|                       | 0.23 | 0.38  | 0.54  | 0.79 | 1.42  | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

#### Mechanical Specifications

##### Cable Assembly

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]

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**PE3W01583LF/HS**

|                              |                        |
|------------------------------|------------------------|
| 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]        |

**Connectors**

| Description                   | Connector 1     | Connector 2          |
|-------------------------------|-----------------|----------------------|
| Type                          | MCX Plug        | MCX Plug Right Angle |
| Specification                 | CECC 22220      | CECC 22220           |
| Impedance                     | 50 Ohms         | 50 Ohms              |
| Contact Material and Plating  | Brass, Gold     | Brass, Gold          |
| Contact Plating Specification | 30 µin minimum  | 30 µin minimum       |
| Dielectric Type               | PTFE            | PTFE                 |
| Body Material and Plating     | Brass, Nickel   | Brass, Nickel        |
| Body Plating Specification    | 100 µin minimum | 100 µin minimum      |

**Environmental Specifications**

**Temperature**

|                 |                  |
|-----------------|------------------|
| Operating Range | -40 to +85 deg C |
| Storage Range   | -70 to +85 deg C |

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

**Plotted and Other Data**

Notes:

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## MCX Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder

### RF Cable Assemblies Technical Data Sheet

**PE3W01583LF/HS**

#### How to Order

Part Number Configuration:

**PE3W01583LF/HS - xx**

**uu**

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

Example: PE3W01583LF/HS-12 = 12 inches long cable  
PE3W01583LF/HS-100cm = 100 cm long cable

MCX Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, 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.

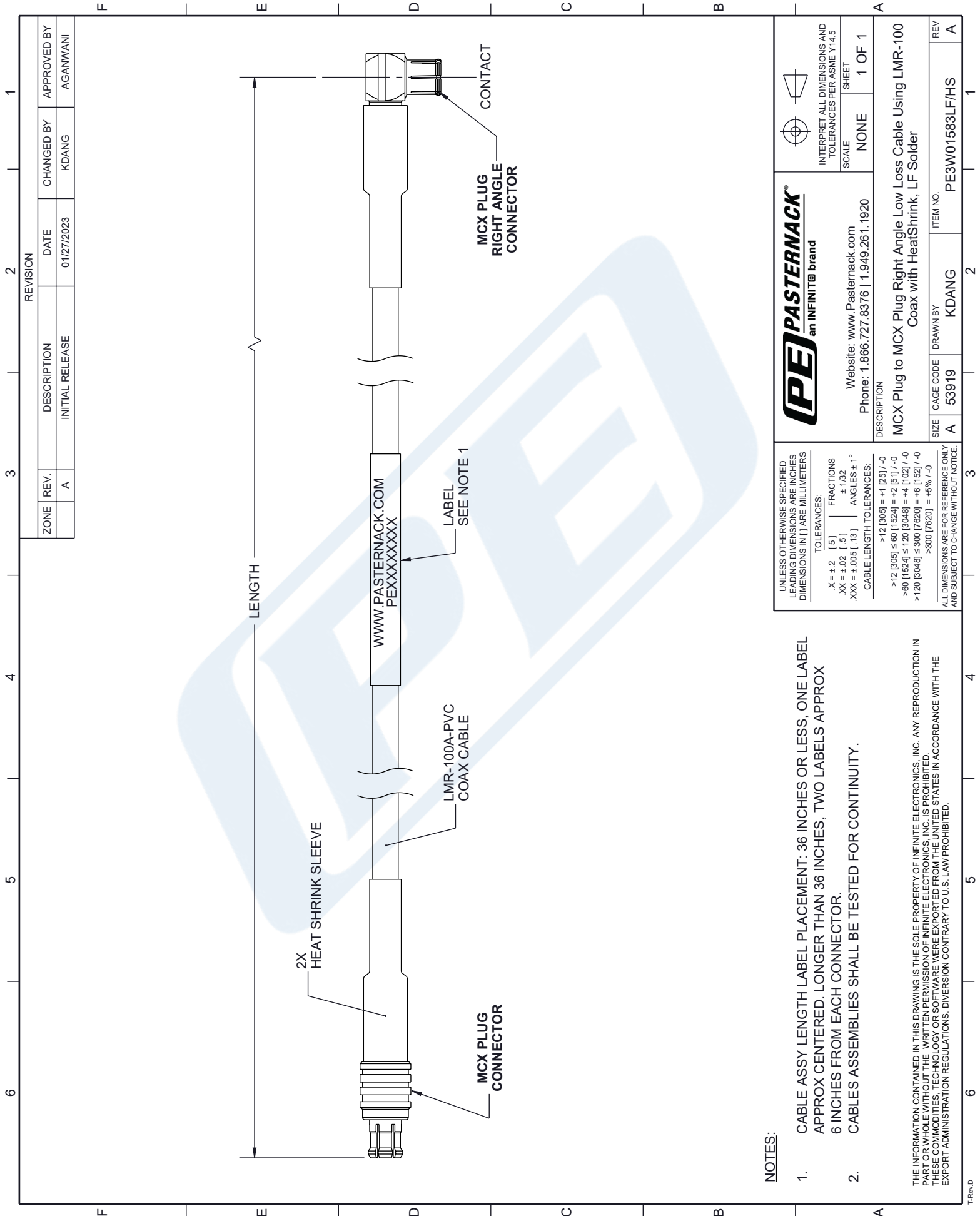
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URL: <https://www.pasternack.com/mcx-plug-to-mcx-plug-low-loss-cable-using-lmr-100-with-heatshrink-lf-solder-pe3w01583lf-hs-p.aspx>

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PE3W01583LF/HS CAD Drawing

MCX Plug to MCX Plug Right Angle Low Loss Cable Using  
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NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION  
**MCX Plug to MCX Plug Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder**

|      |           |          |                |
|------|-----------|----------|----------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO.       |
| A    | 53919     | KDANG    | PE3W01583LF/HS |

|     |   |
|-----|---|
| REV | A |
|-----|---|

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

TOLERANCES:  
X = ±.2 [5] FRACTIONS  
.XX = ±.02 [.5] ±.1/32  
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
>12 [305] = +1 [25] / -0  
>60 [1524] = +2 [51] / -0  
>120 [3048] = +4 [102] / -0  
>300 [7620] = +6 [152] / -0  
>600 [15240] = +8 [254] / -0  
>1200 [30480] = +12 [381] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY  
AND SUBJECT TO CHANGE WITHOUT NOTICE.