



MCX Plug Right Angle to SMA Female Cable 18 Inch Using LMR-195 Coax

RF Cable Assemblies Technical Data Sheet

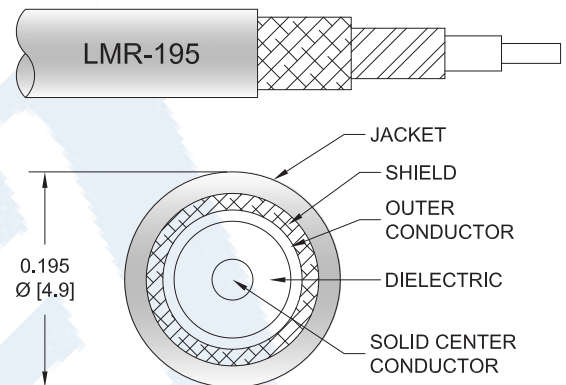
PE3W08540-18

Configuration

- Connector 1: MCX Plug Right Angle
- Connector 2: SMA Female
- Cable Type: LMR-195

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W08540-18 MCX plug right angle to SMA female 18 inch cable using LMR-195 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 female gender configuration with 50 ohm flexible LMR-195 coax. The PE3W08540-18 MCX plug to SMA female cable assembly operates to 3 GHz. The right angle MCX interface on the LMR-195 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 Right Angle to SMA Female Cable 18 Inch Using LMR-195 Coax PE3W08540-18](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|----------------------------------|
| Frequency Range | DC | | 3 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 80 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.27 [4.17] | | ns/ft [ns/m] |
| Capacitance | | 25.4 [83.33] | | pF/ft [pF/m] |
| Inductance | | 0.064 [0.21] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 7.6 [24.93] | | Ω /1000ft [Ω /Km] |
| DC Resistance Outer Conductor | | 4.9 [16.08] | | Ω /1000ft [Ω /Km] |
| Jacket Spark | | | 3,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 3 | GHz |
| Insertion Loss (Max.) | 0.36 | 0.39 | 0.43 | 0.48 | 0.62 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.2 dB per MCX plug right angle connector and 0.1 dB per SMA female connector.

Mechanical Specifications

Cable Assembly

Length* 18 in [457.2 mm]
Diameter 0.25 in [6.35 mm]

Cable

Cable Type LMR-195
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper
Dielectric Type PE (F)
Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid

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| | |
|------------------------------|------------------------|
| Jacket Material | PE, Black |
| Jacket Diameter | 0.195 in [4.95 mm] |
| One Time Minimum Bend Radius | 0.5 in [12.7 mm] |
| Repeated Minimum Bend Radius | 2 in [50.8 mm] |
| Bending Moment | 0.2 lbs-ft [0.27 N-m] |
| Flat Plate Crush | 15 lbs/in [0.27 Kg/mm] |
| Tensile Strength | 40 lbs [18.14 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|----------------------|------------------------|
| Type | MCX Plug Right Angle | SMA Female |
| Specification | CECC 22220 | |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 30 µin minimum | 50µ in. minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100µ in. minimum |

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W08540-18

How to Order

Part Number Configuration:

PE3W08540

- **xx**

uu

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

Example: PE3W08540-12 = 12 inches long cable
PE3W08540-100cm = 100 cm long cable

MCX Plug Right Angle to SMA Female Cable 18 Inch Using LMR-195 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 Right Angle to SMA Female Cable 18 Inch Using LMR-195 Coax PE3W08540-18](#)

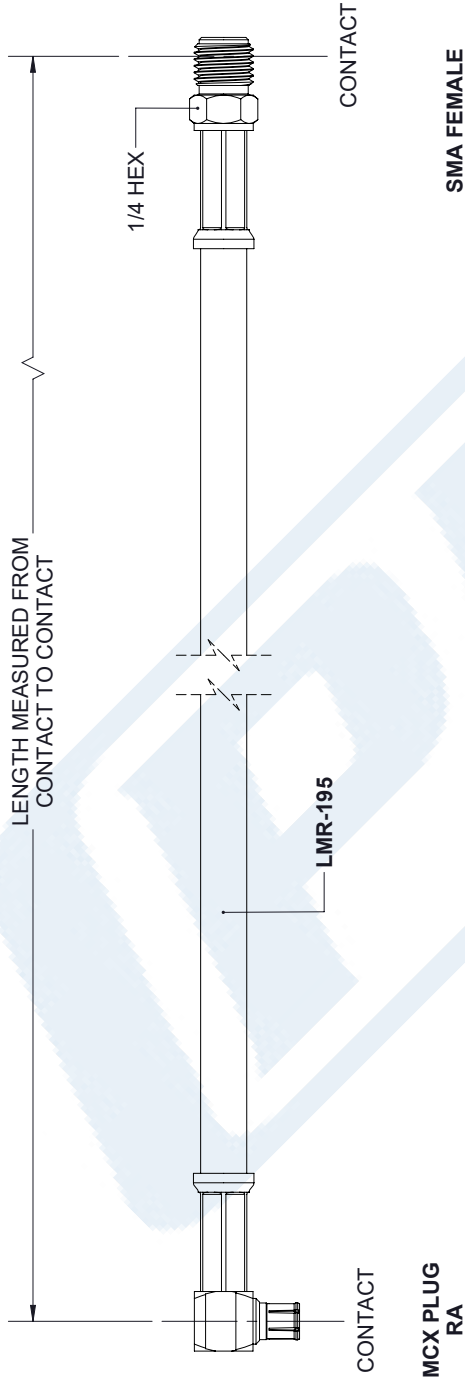
URL: <https://www.pasternack.com/mcx-plug-sma-female-lmr195-cable-assembly-pe3w08540-18-p.aspx>

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.

PE3W08540-18 CAD Drawing

MCX Plug Right Angle to SMA Female Cable 18 Inch Using LMR-195 Coax

| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 1/28/2020 | S. ELLIS |



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

TOLERANCES:

| | | | |
|--------------|-------|------------------------------|-----------------|
| .X = ±.2 | [.08] | FRACTIONS | ± 1/32 |
| .XX = ±.02 | [.51] | ANGLES ± 1° | |
| .XXX = ±.005 | [.13] | CABLE LENGTH (L) TOLERANCES: | |
| | | L ≤ 12 [305] | ± .1 [25] / -0 |
| | | 12 [305] < L ≤ 60 [1524] | ± .2 [51] / -0 |
| | | 60 [1524] < L ≤ 120 [3048] | ± .4 [102] / -0 |
| | | 120 [3048] < L ≤ 300 [7620] | ± .6 [152] / -0 |
| | | 300 [7620] < L ≤ ∞ | ± .9% L / -0 |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | K. DANG | PE3W08540 |
| REV | | | A |

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