



RF Cable Assemblies Technical Data Sheet

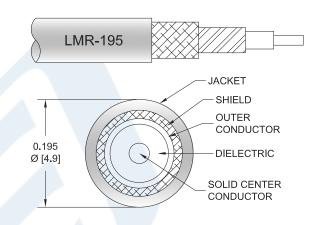
PE3W06854/HS2-100CM

Configuration

- · Connector 1: QN Male
- Connector 2: SMA Female Reverse Polarity Bulkhead
- Cable Type: LMR-195

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- · Double Shielded
- PE Jacket



Applications

· General Purpose

· Laboratory Use

Description

Pasternack's PE3W06854/HS2-100CM QN male to reverse polarity SMA female bulkhead 100 cm 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 QN to reverse polarity SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-195 coax. The PE3W06854/HS2-100CM QN male to reverse polarity SMA female cable assembly operates to 5.8 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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: QN Male to Reverse Polarity SMA Female Bulkhead Cable 100 cm Length Using LMR-195 Coax with Double HeatShrink PE3W06854/HS2-100CM

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|--------------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | 735 | 1.5:1 | |
| 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] | | Ohms/1000ft [Ohms/ |
| Km] | | | | |
| DC Resistance Outer Conductor | | 4.9 [16.08] | | Ohms/1000ft [Ohms/ |
| Km] | V | | | |
| Jacket Spark | | | 3,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.5 | 1 | 2 | 4 | 5.8 | GHz |
| Insertion Loss (Max.) | 0.47 | 0.58 | 0.76 | 0.99 | 1.19 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax use in the assembly. The Insertion Loss includes an estimated insertion loss of 0.2ddB of connector loss.

Mechanical Specifications

Cable Assembly

Length* 39.37 in [100 cm]

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 Laver 1 Aluminum

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

Repeated Minimum Bend Radius

2 in [50.8 mm]

Bending Moment

0.2 lbs-ft [0.27 N-m]

Flat Plate Crush

Tensile Strength

0.5 in [12.7 mm]

2 in [50.8 mm]

40 lbs-ft [0.27 Kg/mm]

40 lbs [18.14 Kg]

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|------------------|--------------------------------------|
| Туре | QN Male | SMA Female Reverse Polarity Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 100 | |
| Contact Material and Plating | Brass, Silver | |
| Dielectric Type | PTFE | |
| Outer Conductor Material and Plating | Beryllium Copper | |
| Body Material and Plating | Brass, Silver | Brass, Nickel |
| Coupling Nut Material and Plating | Brass, Silver | |
| | | |

Mechanical Specification Notes:

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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^{*}All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





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How to Order



Example: PE3W06854/HS2-12 = 12 inches long cable

PE3W06854/HS2-100cm = 100 cm long cable

QN Male to Reverse Polarity SMA Female Bulkhead Cable 100 cm Length Using LMR-195 Coax with Double 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.

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URL: https://www.pasternack.com/qn-male-sma-female-lmr195-cable-assembly-pe3w06854-hs2-100cm-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.

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PE3W06854/HS2-100CM CAD DrawingQN Male to Reverse Polarity SMA Female Bulkhead Cable 100 cm Length Using LMR-195 Coax with Double HeatShrink

