



MHV Female to MHV Male Cable 18 Inch Length Using RG141 Coax

RF Cable Assemblies Technical Data Sheet

PE3W08810-18

Configuration

- Connector 1: MHV Female
- Connector 2: MHV Male
- Cable Type: RG141

Features

- Max Frequency 300 MHz
- 70% Phase Velocity
- PTFE (FG) Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W08810-18 MHV female to MHV male 18 inch cable using RG141 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 MHV to MHV cable assembly has a female to male gender configuration with 50 ohm flexible RG141 coax. The PE3W08810-18 MHV female to MHV male cable assembly operates to 300 MHz.

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 | | 300 | MHz |
| VSWR | | | 1.5:1 | |
| Velocity of Propagation | | 70 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |
| Jacket Spark | | | 2,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|-----|----|-------|
| Frequency | 50 | 100 | 250 | 300 | | MHz |
| Insertion Loss (Max.) | 0.24 | 0.26 | 0.29 | 0.3 | | dB |

Electrical Specification Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MHV Female to MHV Male Cable 18 Inch Length Using RG141 Coax PE3W08810-18](#)



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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 0.1 dB per MHV female and MHV male connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 18 in [457.2 mm] |
| Diameter | 0.57 in [14.48 mm] |

Cable

| | |
|--------------------------------------|---------------------------|
| Cable Type | RG141 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 1 |
| Shield Layer 1 | Silver Plated Copper |
| Jacket Material | PTFE (FG), Beige |
| Jacket Diameter | 0.19 in [4.83 mm] |

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|----------------|-----------------|
| Type | MHV Female | MHV Male |
| Specification | MIL-STD-348 | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Nickel, Silver | Brass, Gold |
| Contact Plating Specification | QQ-S-365 | 30 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Nickel, Silver | Brass, Nickel |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | QQ-N-290 | 100 µin minimum |
| Coupling Nut Material and Plating | | Brass, Nickel |
| Coupling Nut Plating Specification | | 100 µin minimum |
| Seal Gasket Material | | Silicone |

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W08810

- **xx**

uu

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

Example: PE3W08810-12 = 12 inches long cable
PE3W08810-100cm = 100 cm long cable

MHV Female to MHV Male Cable 18 Inch Length Using RG141 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: [MHV Female to MHV Male Cable 18 Inch Length Using RG141 Coax PE3W08810-18](#)

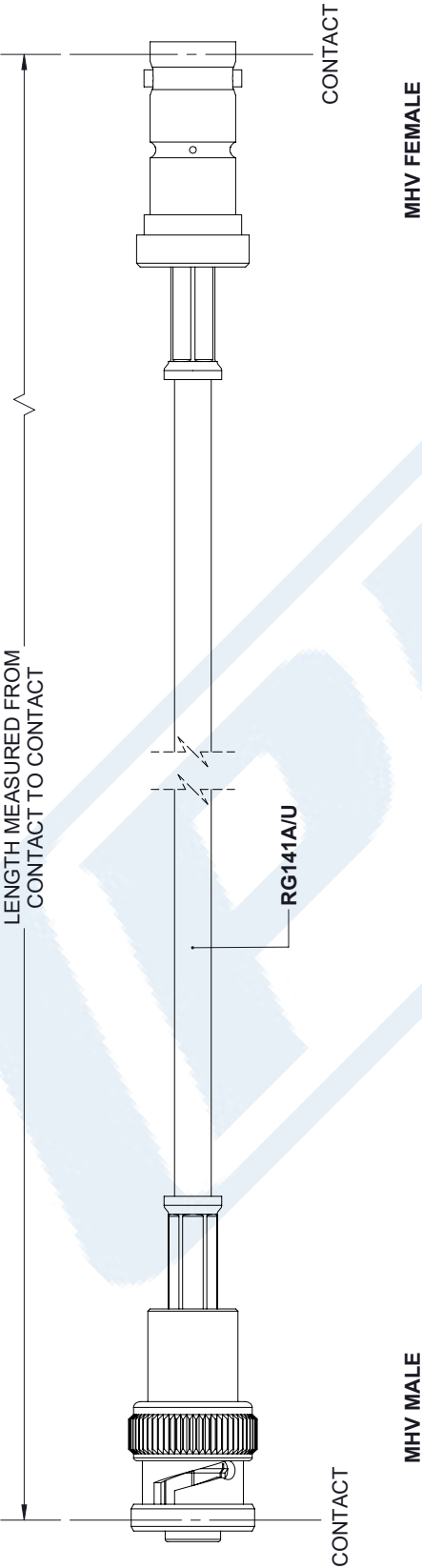
URL: <https://www.pasternack.com/mhv-female-mhv-male-rg141au-cable-assembly-pe3w08810-18-p.aspx>

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.

PE3W08810-18 CAD Drawing

MHV Female to MHV Male Cable 18 Inch Length Using RG141 Coax

| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 1/29/2020 | S.ELLIS |



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

TOLERANCES:

| | | |
|---------------|--------|-------------|
| .X = ± .2 | [5.08] | FRACTIONS |
| .XX = ± .02 | [.51] | ± 1/32 |
| .XXX = ± .005 | [.13] | ANGLES ± 1° |

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 = ∞ | = +5% / -0 |

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITI brand

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THIRD-ANGLE PROJECTION

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| | | | |
|-------|-----|----|---|
| SHEET | 1 | OF | 1 |
| SCALE | N/A | | |
| REV | A | | |

| | | | |
|------|-----------|----------|-----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | K.DANG | PE3W08810 |

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