

SMA Male to SMA Male Non-Magnetic Cable Using PE-SR141-NM Coax



PE3W20175

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-SR141-NM
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity
- Copper Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W20175 SMA male to SMA male cable using PE-SR141-NM coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm semi-rigid PE-SR141-NM coax. The PE3W20175 SMA male to SMA male cable assembly operates to 18 GHz.

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 | | 18 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | 165 | | | dB |

Specifications by Frequency

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| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-----------|-------|-------|-------|-------|-------|--------------|
| | | | Frequency | | 1000 | 2000 | 4500 | 9000 | |
| PE3W20175 | Custom Lengths Available | Insertion Loss (Typ.) | 0.11 | 0.152 | 0.259 | 0.403 | 0.636 | dB/ft | |
| | | | 0.37 | 0.5 | 0.85 | 1.33 | 2.09 | dB/m | |
| PE3W20175-6 | 6 inch | Insertion Loss (Typ.) | 0.26 | 0.28 | 0.33 | 0.41 | 0.52 | dB | 0.02 |
| PE3W20175-12 | 12 inch | Insertion Loss (Typ.) | 0.31 | 0.36 | 0.46 | 0.61 | 0.84 | dB | 0.029 |
| PE3W20175-24 | 24 inch | Insertion Loss (Typ.) | 0.42 | 0.51 | 0.72 | 1.01 | 1.48 | dB | 0.048 |
| PE3W20175-36 | 36 inch | Insertion Loss (Typ.) | 0.53 | 0.66 | 0.98 | 1.41 | 2.11 | dB | 0.066 |
| PE3W20175-60 | 60 inch | Insertion Loss (Typ.) | 0.75 | 0.96 | 1.5 | 2.22 | 3.38 | dB | 0.103 |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

| | |
|-----------------------------|----------------|
| Loss due to Connector 1: | 0.1 dB |
| Loss due to Connector 2: | 0.1 dB |
| Base Weight: | 0.029 pounds |
| Additional Weight per Inch: | 0.00153 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.029 lbs [13.15 g] |

Cable

| | |
|--|----------------------|
| Cable Type | PE-SR141-NM |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Silver Plated Copper |
| Dielectric Type | PTFE |
| Number of Shields | 1 |
| Outer Conductor 1 Material and Plating | Copper |
| Jacket Material | Copper |
| Repeated Minimum Bend Radius | 0.25 in [6.35 mm] |

Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|----------------------------|----------------------------|
| Type | SMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Body Material and Plating | Brass, Gold over Nickel | Brass, Gold over Nickel |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Hex Size | 5/16 inch | 5/16 inch |
| Torque | 8 in-lbs 0.9 Nm | 8 in-lbs 0.9 Nm |

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Environmental Specifications

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

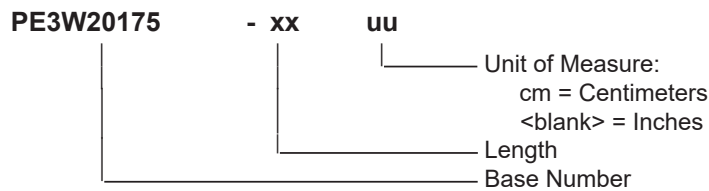
Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3W20175-12 = 12 inches long cable
PE3W20175-100cm = 100 cm long cable

SMA Male to SMA Male Non-Magnetic Cable Using PE-SR141-NM 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 to SMA Male Non-Magnetic Cable Using PE-SR141-NM Coax PE3W20175](#)

URL: <https://www.pasternack.com/sma-male-to-sma-male-cable-using-pe-sr141-nm-pe3w20175-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W20175 CAD Drawing

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