

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



PE3C10856

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
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10856 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 PE3C10856 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 | |
| PE3C10856 | 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 | |
| PE3C10856-6 | 6 inch | Insertion Loss (Typ.) | 0.4 | 0.42 | 0.47 | 0.55 | 0.66 | dB | 0.014 |
| PE3C10856-12 | 12 inch | Insertion Loss (Typ.) | 0.45 | 0.5 | 0.6 | 0.75 | 0.98 | dB | 0.023 |
| PE3C10856-24 | 24 inch | Insertion Loss (Typ.) | 0.56 | 0.65 | 0.86 | 1.15 | 1.62 | dB | 0.042 |
| PE3C10856-36 | 36 inch | Insertion Loss (Typ.) | 0.67 | 0.8 | 1.12 | 1.55 | 2.25 | dB | 0.06 |
| PE3C10856-60 | 60 inch | Insertion Loss (Typ.) | 0.89 | 1.1 | 1.64 | 2.36 | 3.52 | dB | 0.097 |

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: 0.17 dB
 Loss due to Connector 2: 0.17 dB
 Base Weight: 0.023 pounds
 Additional Weight per Inch: 0.00153 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.023 lbs [10.43 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]

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------|-------------|
| Type | SMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Gold | Gold |
| Contact Plating Specification | MIL-G-45204 | MIL-G-45204 |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Gold | Brass, Gold |
| Body Plating Specification | ASTM-B-16 | ASTM-B-16 |
| Coupling Nut Material and Plating | Brass, Gold | Brass, Gold |
| Coupling Nut Plating Specification | ASTM-B-16 | ASTM-B-16 |

Environmental Specifications

Operating Range Temperature -55 to +125 deg C

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

Plotted and Other Data

Notes:

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PE3C10856

Typical Performance Data

How to Order

Part Number Configuration:

PE3C10856

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10856-12 = 12 inches long cable
PE3C10856-100cm = 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.

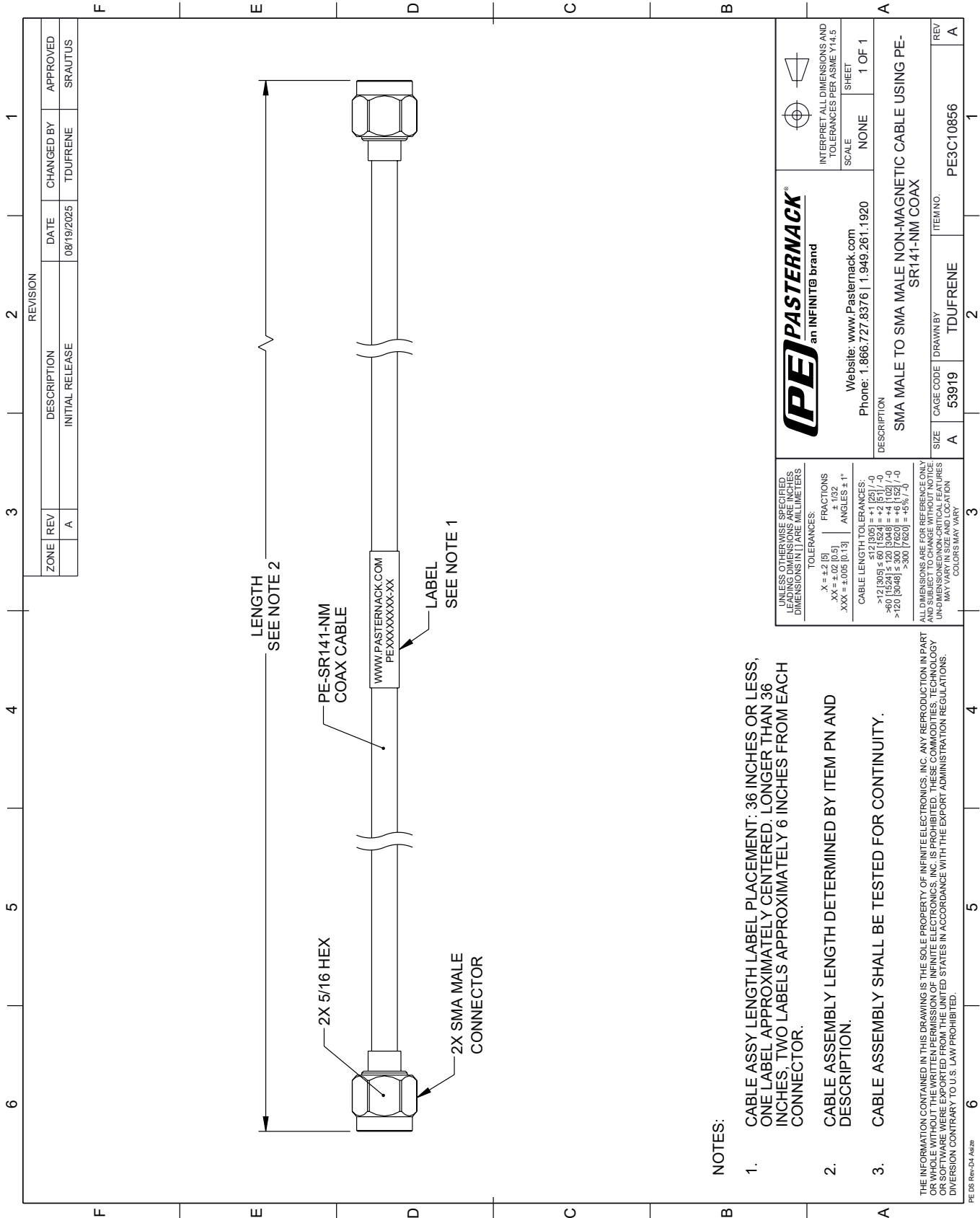
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Non-Magnetic Cable Using PE-SR141-NM Coax PE3C10856](#)

URL: <https://www.pasternack.com/sma-male-to-sma-male-non-magnetic-cable-using-pe-sr141-nm-pe3c10856-p.aspx>

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PE3C10856 CAD Drawing

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



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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PE DS Rev-04 Add2

| REVISION | | DATE | CHANGED BY | APPROVED | |
|----------|-----|-----------------|------------|------------|----------|
| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
| | A | INITIAL RELEASE | 08/19/2025 | TDUFRENE | SRAUTUS |

| | | | |
|---|------|--|-----------|
| | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | SCALE | SHEET |
| SMA MALE TO SMA MALE NON-MAGNETIC CABLE USING PE-SR141-NM COAX | | NONE | 1 OF 1 |
| DESCRIPTION | SIZE | CAGE CODE | ITEM NO. |
| | A | 53919 | PE3C10856 |
| DRAWN BY TDUFRENE DRAWN BY TDUFRENE | | REV A | |

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

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.8 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. COLORS MAY VARY.