



SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 100CM

RF Cable Assemblies Technical Data Sheet

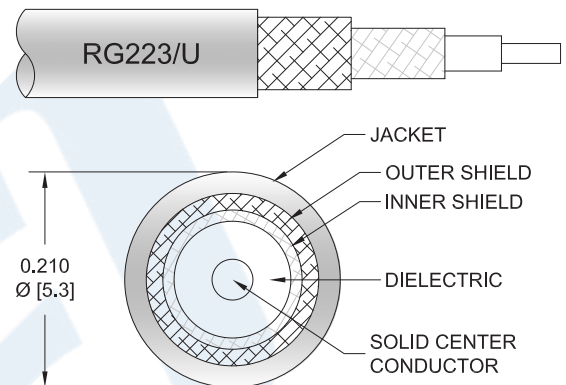
PE33254/HS-100CM

Configuration

- Connector 1: SMA Female
- Connector 2: SMA Female
- Cable Type: RG223

Features

- Max Frequency 12.4 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE33254/HS-100CM SMA female to SMA female 100 cm cable using RG223 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 SMA to SMA cable assembly has a female to female gender configuration with 50 ohm flexible RG223 coax. The PE33254/HS-100CM SMA female to SMA female cable assembly operates to 12.4 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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: [SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 100CM PE33254/HS-100CM](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|---------------|---------|--------------|
| Frequency Range | DC | | 12.4 | GHz |
| VSWR | | | 1.5:1 | |
| Velocity of Propagation | | 66 | | % |
| Capacitance | | 30.8 [101.05] | | pF/ft [pF/m] |
| Operating Voltage (AC) | | | 500 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-----|------|------|-----|------|-------|
| Frequency | 0.5 | 1 | 2.5 | 5 | 12.4 | GHz |
| Insertion Loss (Typ.) | 0.5 | 0.64 | 0.92 | 1.3 | 2.2 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|---------|---------------------|
| Length* | 39.37 in [100 cm] |
| Weight | 0.095 lbs [43.09 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | RG223 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Braid |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | PVC, Black |
| Jacket Diameter | 0.209 in [5.31 mm] |

| | |
|------------------------------|-------------------|
| One Time Minimum Bend Radius | 0.21 in [5.33 mm] |
| Repeated Minimum Bend Radius | 1 in [25.4 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|-------------------------------|------------------------|------------------------|
| Type | SMA Female | SMA Female |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 50μ in. minimum. | 50μ in. minimum. |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100μ in. minimum. | 100μ in. minimum. |

Environmental Specifications

Temperature

Operating Range

-40 to +80 deg C

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE33254/HS - xx uu

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

Example: PE33254/HS-12 = 12 inches long cable
PE33254/HS-100cm = 100 cm long cable

SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 100CM 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 Female to SMA Female Cable Using RG223 Coax with HeatShrink in 100CM PE33254/HS-100CM](#)

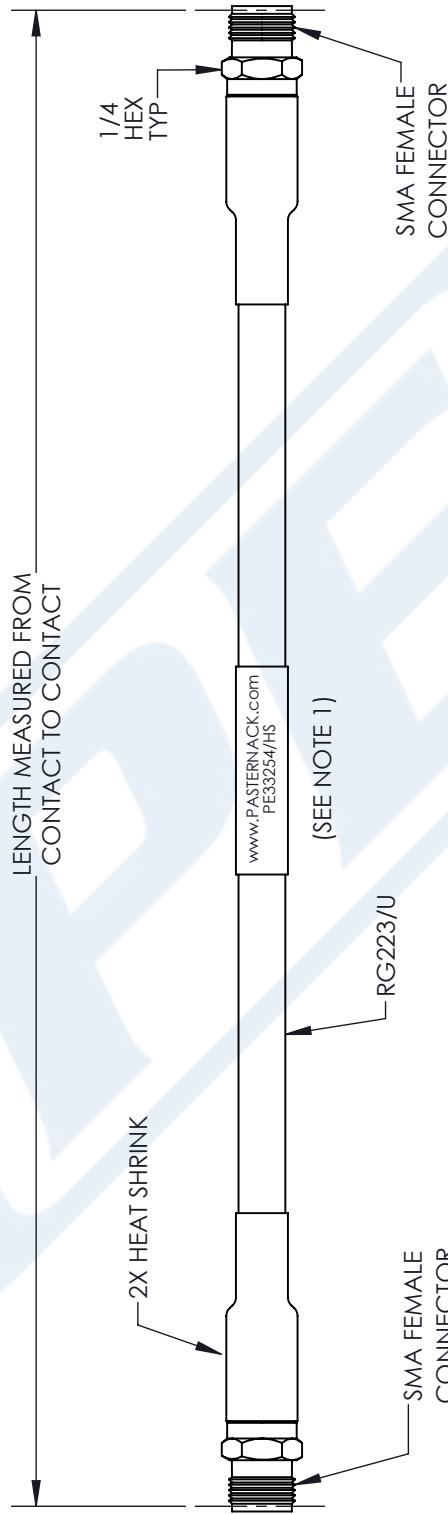
URL: <https://www.pasternack.com/sma-female-sma-female-rg223u-cable-assembly-pe33254-hs-100cm-p.aspx>

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.

PE33254/HS-100CM CAD Drawing

SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 100CM

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 08/10/2022 | AGANWANI |



NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM END OF CONNECTOR

| | |
|--|----------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | FRACTIONS |
| .X = ±.2 [.51] | ±.1/32 |
| .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% L / -0 |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | |

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| | | | |
|------|-----------|-----------|------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | BPUCHASKI | PE33254/HS |

| | |
|---|-----------|
| THIRD-ANGLE PROJECTION | 1 OF 1 |
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| SHEET 1 OF 1 | REV A |

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