



## SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 50CM

### RF Cable Assemblies Technical Data Sheet

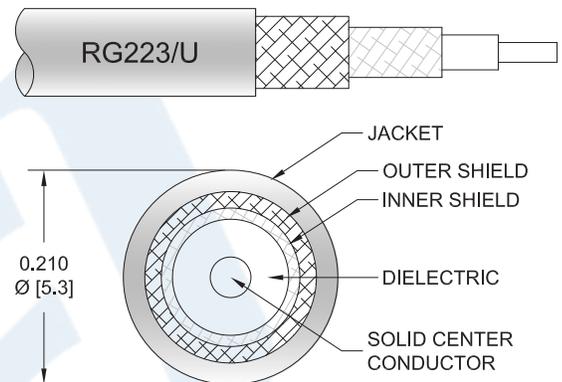
**PE33254/HS-50CM**

#### 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-50CM SMA female to SMA female 50 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-50CM 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 50CM PE33254/HS-50CM](#)



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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.)	0.35	0.42	0.56	0.75	1.2	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*	19.685 in [500 mm]
Weight	0.044 lbs [19.96 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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### RF Cable Assemblies Technical Data Sheet

### PE33254/HS-50CM

#### 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 50CM 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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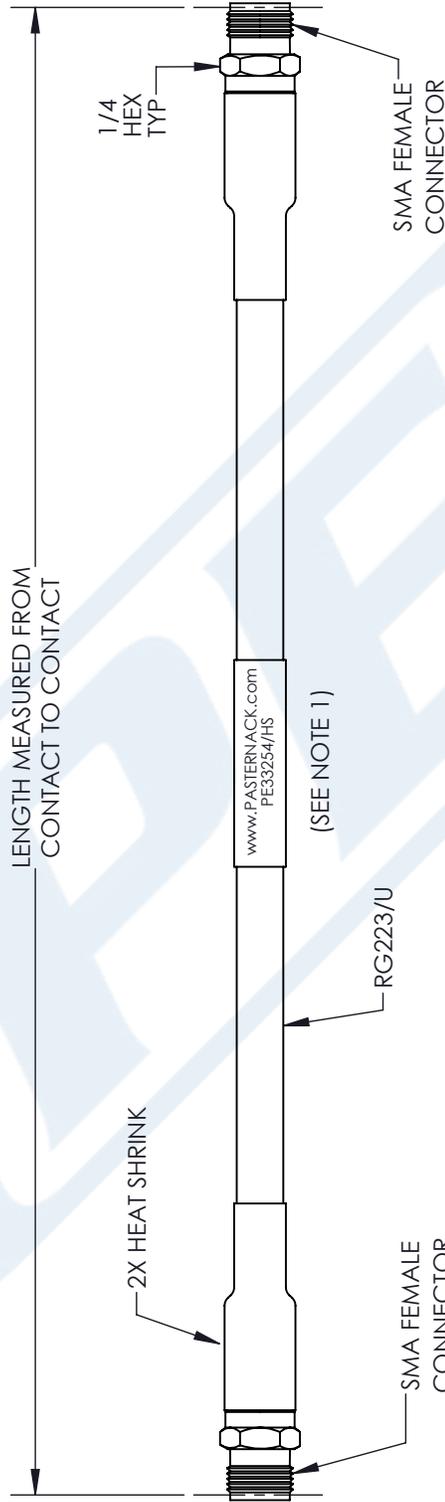
URL: <https://www.pasternack.com/sma-female-sma-female-rg223u-cable-assembly-pe33254-hs-50cm-p.aspx>

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-50CM CAD Drawing

SMA Female to SMA Female Cable Using RG223 Coax with HeatShrink in 50CM

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% / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

**PE PASTERNAK**  
an INFINITI® brand

Pasternack Enterprises, Inc.  
P. O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

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

THIRD-ANGLE PROJECTION	1	OF	1
SCALE	N/A		
REV	A		

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