

N Male to SMA Male Cable Using RG142 Coax with HeatShrink



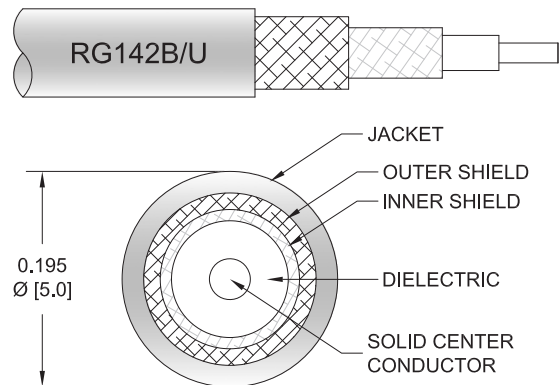
PE3W03293/HS

Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 70 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03293/HS type N male to SMA male cable using RG142 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 type N to SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3W03293/HS type N male to SMA male cable assembly operates to 8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 70 dB.

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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	70			dB
Capacitance		96.45 [316.44]		pF/ft [pF/m]
DC Resistance Inner Conductor		65 [213.25]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9 [29.53]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

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PE3W03293/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		500	1000	2000	4000	
PE3W03293/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.09	0.13	0.18	0.28	0.442	dB/ft	
			0.29	0.43	0.61	0.92	1.45	dB/m	
PE3W03293/HS-12	12 inch	Insertion Loss (Typ.)	0.29	0.33	0.39	0.48	0.65	dB	0.125
PE3W03293/HS-24	24 inch	Insertion Loss (Typ.)	0.38	0.46	0.57	0.76	1.09	dB	0.167
PE3W03293/HS-36	36 inch	Insertion Loss (Typ.)	0.47	0.59	0.76	1.04	1.53	dB	0.209
PE3W03293/HS-48	48 inch	Insertion Loss (Typ.)	0.55	0.72	0.94	1.32	1.97	dB	0.251
PE3W03293/HS-60	60 inch	Insertion Loss (Typ.)	0.64	0.85	1.12	1.6	2.41	dB	0.293

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:	0.125 pounds
Additional Weight per Inch:	0.0035 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.083 lbs [37.65 g]

Cable

Cable Type	RG142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.98 in [24.89 mm]
Repeated Minimum Bend Radius	1.97 in [50.04 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size	18 mm	5/16 inch
Torque	9 in-lbs 1.02 Nm	3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

N Male to SMA Male Cable Using RG142 Coax with HeatShrink



PE3W03293/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W03293/HS

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W03293/HS-12 = 12 inches long cable
PE3W03293/HS-100cm = 100 cm long cable

N Male to SMA Male Cable Using RG142 Coax with HeatShrink 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.

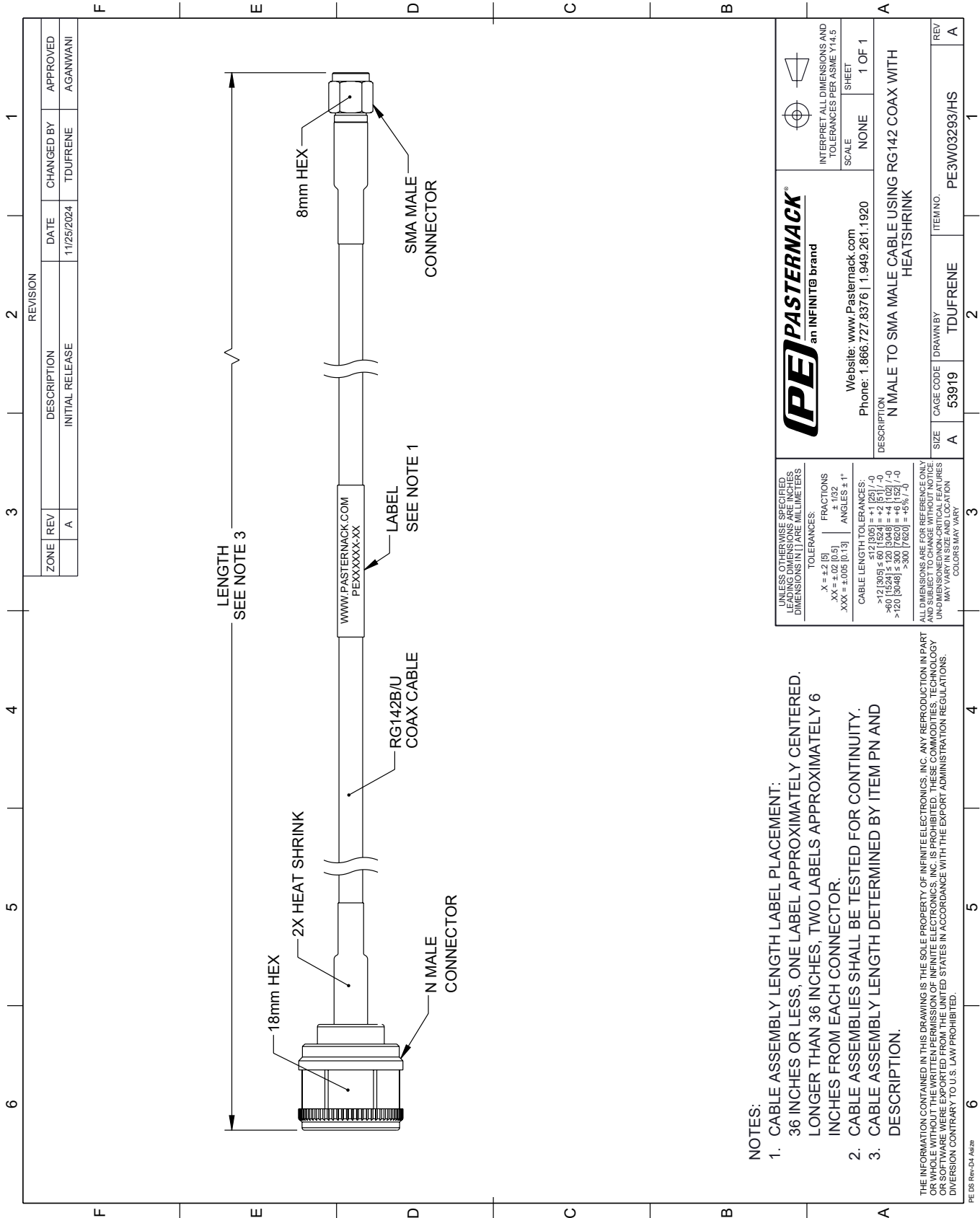
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to SMA Male Cable Using RG142 Coax with HeatShrink PE3W03293/HS](https://www.pasternack.com/n-male-to-sma-male-cable-using-rg142-with-heatshrink-pe3w03293-hs)

URL: <https://www.pasternack.com/n-male-to-sma-male-cable-using-rg142-with-heatshrink-pe3w03293-hs-p.aspx>

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PE3W03293/HS CAD Drawing

N Male to SMA Male Cable Using RG142 Coax with HeatShrink



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	11/25/2024	TDUFRENE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

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

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

TOLERANCES:

.X = ±.2 [5]	FRACTIONS	± 1/32
.XX = ±.02 [0.5]		± 1/64
.XXX = ±.005 [0.13]	ANGLES ± 1°	

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524]	± 1 [25] / -0
>60 [1524] ≤ 120 [3048]	± 4 [102] / -0
>120 [3048] ≤ 300 [7620]	± 8 [203] / -0
>300 [7620]	± 16 [406] / -0

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

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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: N MALE TO SMA MALE CABLE USING RG142 COAX WITH HEATSHRINK

SIZE	A	CAGE CODE	53919	DRAWN BY	TDUFRENE	ITEM NO.	PE3W03293/HS
REV	A						

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