



RF Cable Assemblies Technical Data Sheet

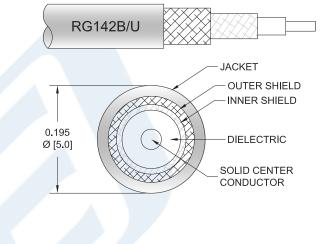
PE3W00921-50CM

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: N Male
- Cable Type: RG142

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 69.2% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

General Purpose

Laboratory Use

Description

Pasternack's PE3W00921-50CM SMA male right angle to type N male 50 cm 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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3W00921-50CM SMA male to type N male cable assembly operates to 6 GHz. The right angle SMA interface on the RG142 cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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		6	GHz
VSWR			1.5:1	
Velocity of Propagation		69.2		%
RF Shielding	90			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male Right Angle to N Male Cable 50 cm Length Using RG142 Coax PE3W00921-50CM



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PCTERNACK

PE3W00921-50CM

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5	GHz
Insertion Loss (Max.)	0.28	0.33	0.4	0.53	0.77	dB

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly Length* Diameter

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

19.69 in [500.13 mm] 0.83 in [21.08 mm]

RG142 50 Ohms Solid Copper Clad Steel, Silver PTFE 2 Silver Plated Copper Braid Silver Plated Copper Braid FEP, Tan 0.195 in [4.95 mm]

0.984 in [24.99 mm] 2 in [50.8 mm]

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Connectors

Description	Connector 1	Connector 2	
Туре	SMA Male Right Angle	N Male	
Specification	MIL-STD-348A	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Gold	Brass, Gold	
Contact Plating Specification	50µ in. minimum		
Dielectric Type	Teflon	Teflon	
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal	
Body Plating Specification	100µ in. minimum		
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal	
Coupling Nut Plating Specification	100µ in. minimum		
Hex Size	5/16 in	18 mm	
Torque	5 in-lbs [0.57 Nm]	9 in-lbs [1.02 Nm]	

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Environmental Specifications

Temperature Operating Range

-55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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PE3W00921-50CM

PE3W00921-36 VSWR 2.00 1.90 1.80 1.70 1.60 1.50 1.40 1.30 1.20 1.10 1.00 0.0 GHz 0.6 1.2 1.8 3.0 3.6 2.4 4.2 4.8 5.4 6.0

Typical Performance Data

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PE3W00921-50CM

How to Order PE3W00921 Part Number Configuration: - XX uu - Unit of Measure: cm = Centimeters <blank> = Inches Length Base Number Example: PE3W00921-12 = 12 inches long cable PE3W00921-100cm = 100 cm long cable SMA Male Right Angle to N Male Cable 50 cm Length Using RG142 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 Right Angle to N Male Cable 50 cm Length Using RG142 Coax PE3W00921-50CM URL: https://www.pasternack.com/sma-male-n-male-rg142bu-cable-assembly-pe3w00921-50cm-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.

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PE3W00921-50CM CAD Drawing SMA Male Right Angle to N Male Cable 50 cm Length Using RG142 Coax

