



### **RF Cable Assemblies Technical Data Sheet**

#### PE3W00921-24

# Configuration

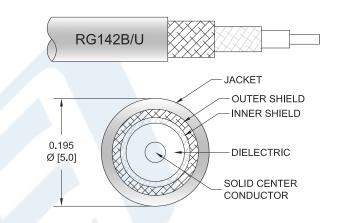
• Connector 1: SMA Male Right Angle

Connector 2: N Male
 DOMAGE

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 PE3W00921-24 SMA male right angle to type N male 24 inch 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 PE3W00921-24 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 24 Inch Length Using RG142 Coax PE3W00921-24

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

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#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 5    | GHz   |
| Insertion Loss (Max.) | 0.3  | 0.37 | 0.46 | 0.62 | 0.92 | 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\* 24 in [609.6 mm]
Diameter 0.83 in [21.08 mm]

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 0.984 in [24.99 mm]
Repeated Minimum Bend Radius 2 in [50.8 mm]

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#### **Connectors**

| Description                        | Connector 1          | Connector 2  N Male |  |
|------------------------------------|----------------------|---------------------|--|
| Туре                               | SMA Male Right Angle |                     |  |
| 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:

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

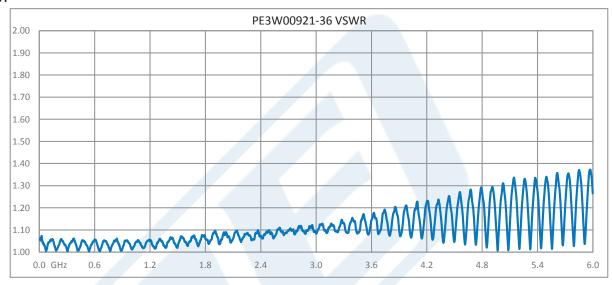




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#### **Typical Performance Data**



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## **RF Cable Assemblies Technical Data Sheet**

#### PE3W00921-24

#### **How to Order**



Example: PE3W00921-12 = 12 inches long cable PE3W00921-100cm = 100 cm long cable

SMA Male Right Angle to N Male Cable 24 Inch 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 24 Inch Length Using RG142 Coax PE3W00921-24

URL: https://www.pasternack.com/sma-male-n-male-rg142bu-cable-assembly-pe3w00921-24-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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PE3W00921-24 CAD Drawing
SMA Male Right Angle to N Male Cable 24 Inch Length Using RG142 Coax

