

TNC Male Right Angle to N Male Cable Using RG142 Coax with HeatShrink



PE3W02219/HS

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: N Male
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02219/HS TNC male right angle to type N 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 TNC to type N cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3W02219/HS TNC male to type N male cable assembly operates to 3 GHz. The right angle TNC interface on the RG142 cable allows for easier connections in tight spaces. 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		100	250	500	1000	
PE3W02219/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.09	0.13	0.239	dB/ft	
			0.13	0.2	0.29	0.43	0.79	dB/m	
PE3W02219/HS-12	12 inch	Insertion Loss (Typ.)	0.34	0.36	0.39	0.43	0.54	dB	0.172
PE3W02219/HS-24	24 inch	Insertion Loss (Typ.)	0.38	0.42	0.48	0.56	0.78	dB	0.214
PE3W02219/HS-36	36 inch	Insertion Loss (Typ.)	0.42	0.48	0.57	0.69	1.02	dB	0.256
PE3W02219/HS-48	48 inch	Insertion Loss (Typ.)	0.46	0.54	0.65	0.82	1.26	dB	0.298
PE3W02219/HS-60	60 inch	Insertion Loss (Typ.)	0.5	0.6	0.74	0.95	1.5	dB	0.34

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: 0.2 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.172 pounds
 Additional Weight per Inch: 0.0035 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.17 lbs [77.11 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]
 Repeated Minimum Bend Radius 1 in [25.4 mm]

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Connectors

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

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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PE3W02219/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W02219/HS - xx uu

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

Example: PE3W02219/HS-12 = 12 inches long cable
 PE3W02219/HS-100cm = 100 cm long cable

TNC Male Right Angle to N 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.

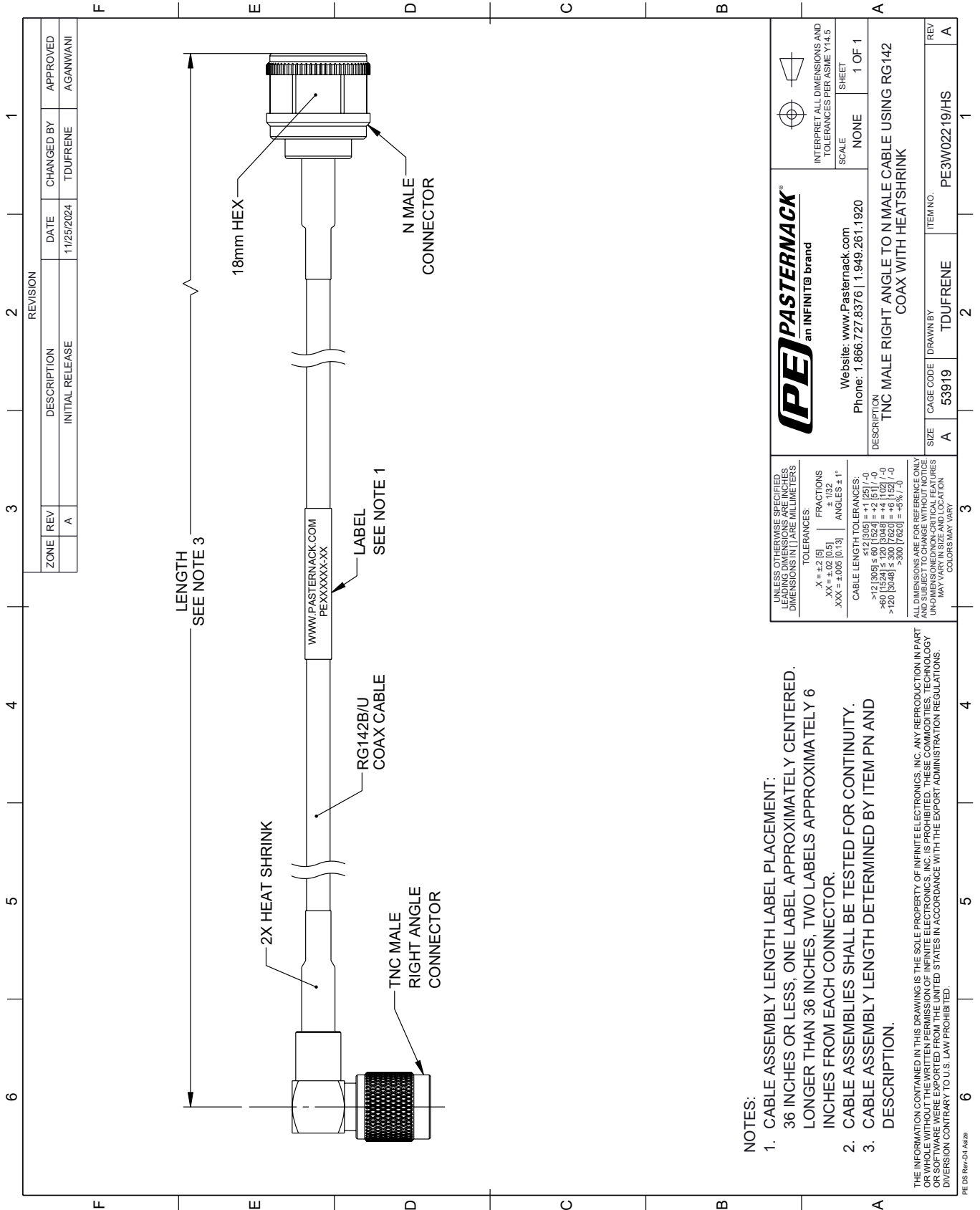
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to N Male Cable Using RG142 Coax with HeatShrink PE3W02219/HS](https://www.pasternack.com/tnc-male-right-angle-to-n-male-cable-using-rg142-with-heatshrink-pe3w02219-hs-p.aspx)

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PE3W02219/HS CAD Drawing

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- NOTES:
1. 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.
 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: TNC MALE RIGHT ANGLE TO N MALE CABLE USING RG142 COAX WITH HEATSHRINK

SIZE	A	CAGE CODE	53919	DRAWN BY	TDUFRENE	ITEM NO.	PE3W02219/HS	REV	A
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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = +.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS:
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.