

TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink

PE3544/HS

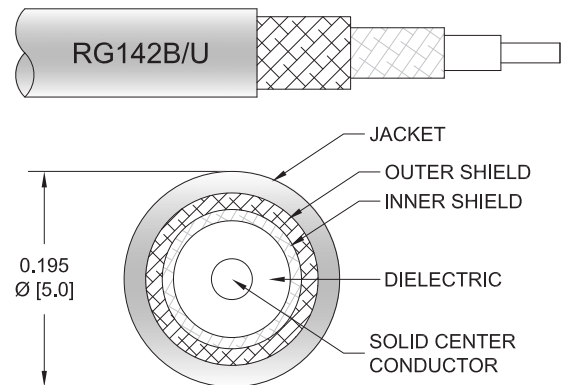


Configuration

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

Features

- Max Frequency 6 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3544/HS TNC male to TNC 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 TNC cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3544/HS TNC male to TNC male cable assembly operates to 6 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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

TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink



PE3544/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3544/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.059	0.087	0.129	0.212	0.385	dB/ft	
			0.2	0.29	0.43	0.7	1.27	dB/m	
PE3544/HS-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.42	0.59	dB	0.108
PE3544/HS-24	24 inch	Insertion Loss (Typ.)	0.32	0.38	0.46	0.63	0.97	dB	0.15
PE3544/HS-36	36 inch	Insertion Loss (Typ.)	0.38	0.47	0.59	0.84	1.36	dB	0.192
PE3544/HS-48	48 inch	Insertion Loss (Typ.)	0.44	0.55	0.72	1.05	1.74	dB	0.234
PE3544/HS-60	60 inch	Insertion Loss (Typ.)	0.5	0.64	0.85	1.26	2.13	dB	0.276

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:	0.108 pounds
Additional Weight per Inch:	0.0035 pounds

Mechanical Specifications

Cable Assembly

Weight	0.108 lbs [48.99 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]

TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink

PE3544/HS



Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC 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 minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink



PE3544/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3544/HS - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: PE3544/HS-12 = 12 inches long cable
PE3544/HS-100cm = 100 cm long cable

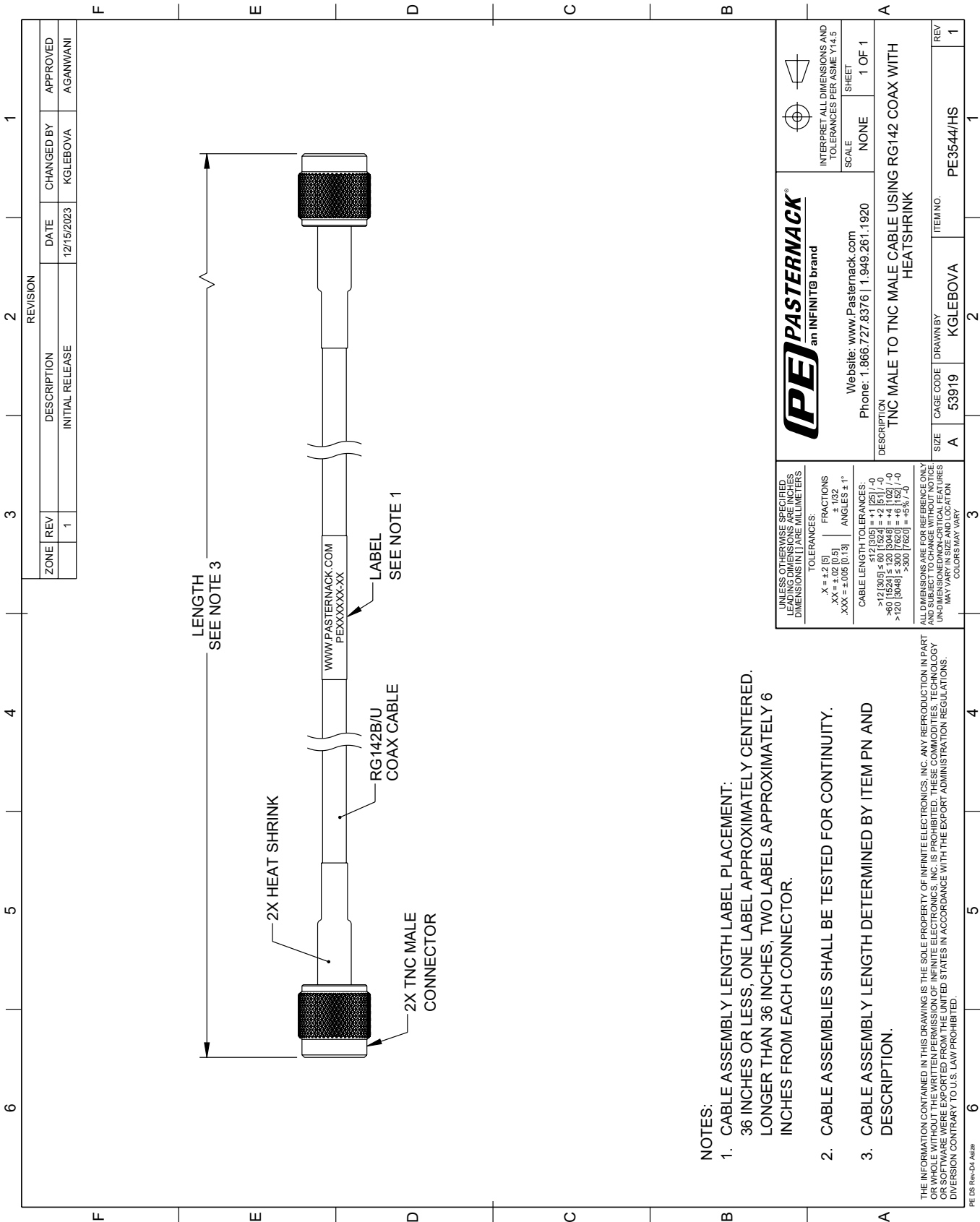
TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink PE3544/HS](#)

URL: <https://www.pasternack.com/tnc-male-to-tnc-male-cable-using-rg142-with-heatshrink-pe3544-hs-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3544/HS CAD Drawing
TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink



- 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.