

TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink



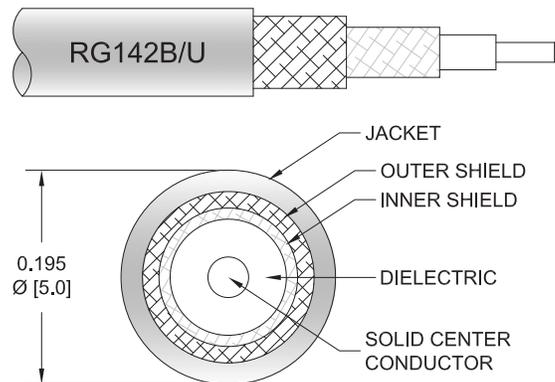
PE3544/HS

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

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| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-----------|-------|-------|-------|-------|-------|--------------|
| | | | Frequency | | 250 | 500 | 1000 | 2500 | |
| 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] |

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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:

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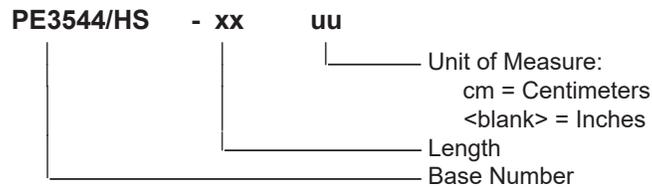


PE3544/HS

Typical Performance Data

How to Order

Part Number Configuration:



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.

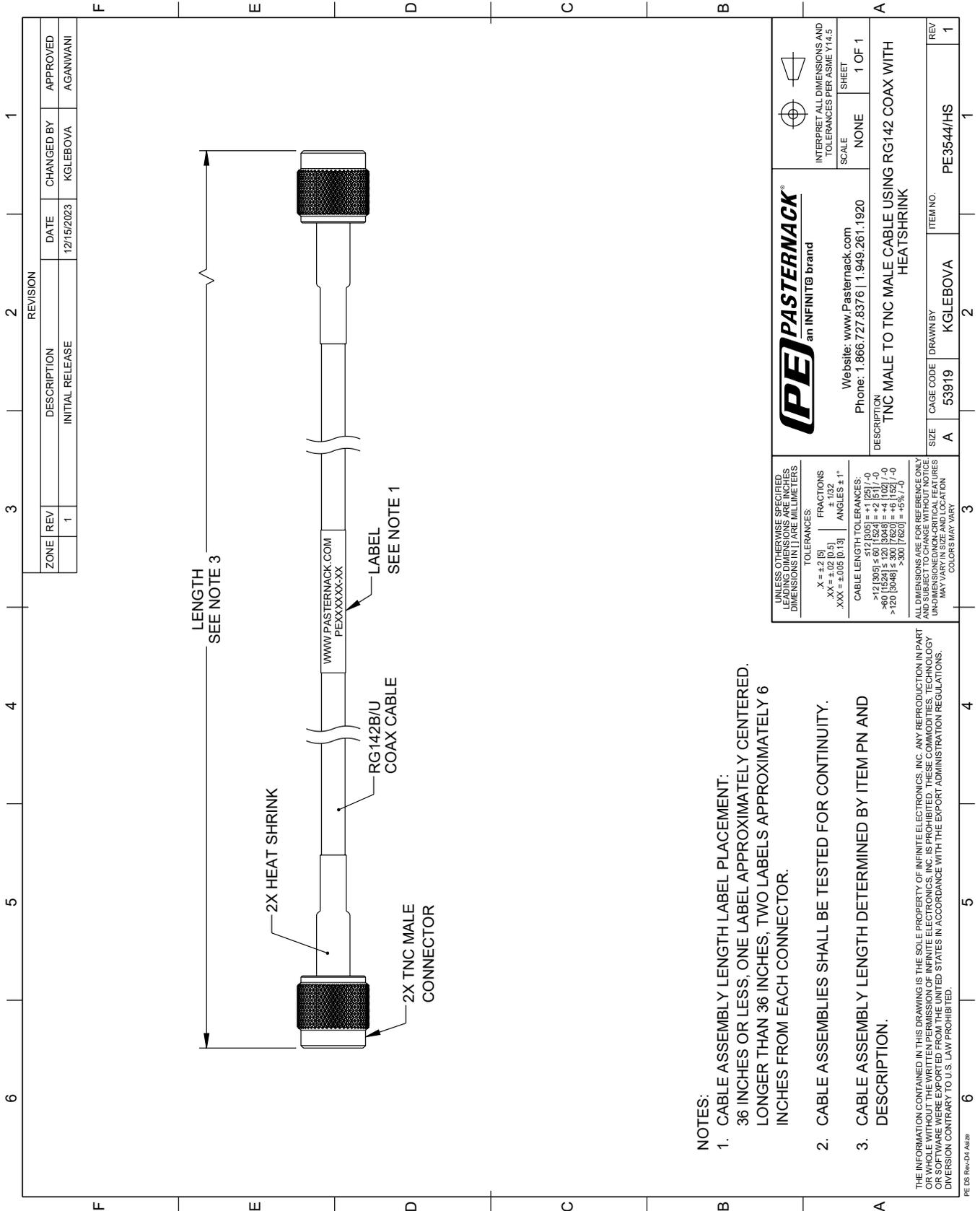
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Male Cable Using RG142 Coax with HeatShrink PE3544/HS](#)

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

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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.

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN [] ARE MILLIMETERS.

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PE DS Rev-D4 Add2

| REVISION | | DATE | CHANGED BY | APPROVED |
|----------|-----|------------|-----------------|----------|
| ZONE | REV | 12/15/2023 | KGLEBOVA | AGANWANI |
| | 1 | | INITIAL RELEASE | |

| | | | |
|---|------|--|-----------|
| | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | | SCALE | SHEET |
| TNC MALE TO TNC MALE CABLE USING RG142 COAX WITH HEATSHRINK | | NONE | 1 OF 1 |
| DESCRIPTION | SIZE | CAGE CODE | ITEM NO. |
| | A | 53919 | PE3544/HS |
| SIZE | A | 53919 | 1 |
| DESCRIPTION | SIZE | CAGE CODE | ITEM NO. |
| | A | 53919 | PE3544/HS |