

## SMA Male to TNC Male Cable Using RG142 Coax with HeatShrink



### PE3664/HS

#### Configuration

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

#### Features

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

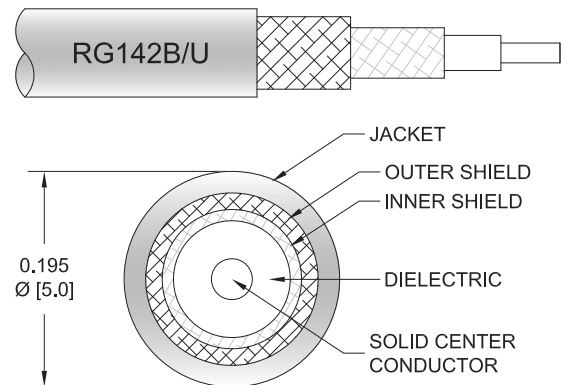
#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3664/HS SMA 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3664/HS SMA male to TNC male cable assembly operates to 6 GHz. 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			1.4:1	
Velocity of Propagation		69.2		%
RF Shielding	90			dB
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					MHz	
PE3664/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	
PE3664/HS-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.42	0.59	dB	0.09
PE3664/HS-24	24 inch	Insertion Loss (Typ.)	0.32	0.38	0.46	0.63	0.97	dB	0.132
PE3664/HS-36	36 inch	Insertion Loss (Typ.)	0.38	0.47	0.59	0.84	1.36	dB	0.174
PE3664/HS-48	48 inch	Insertion Loss (Typ.)	0.44	0.55	0.72	1.05	1.74	dB	0.216
PE3664/HS-60	60 inch	Insertion Loss (Typ.)	0.5	0.64	0.85	1.26	2.13	dB	0.258

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:	0.09 pounds
Additional Weight per Inch:	0.0035 pounds

### Mechanical Specifications

#### Cable Assembly

Weight 0.09 lbs [40.82 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]
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
Type	SMA 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	50 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
Hex Size	5/16 in	
Torque	5 in-lbs 0.57 Nm	

#### Environmental Specifications

Operating Range Temperature -55 to +155 deg C

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

#### Plotted and Other Data

Notes:

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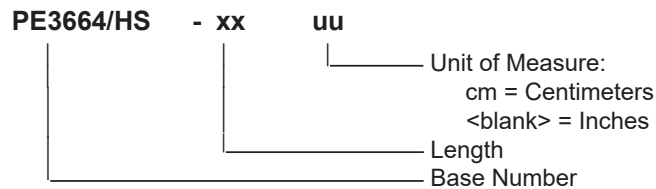


### PE3664/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:



Example: PE3664/HS-12 = 12 inches long cable  
PE3664/HS-100cm = 100 cm long cable

SMA 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.

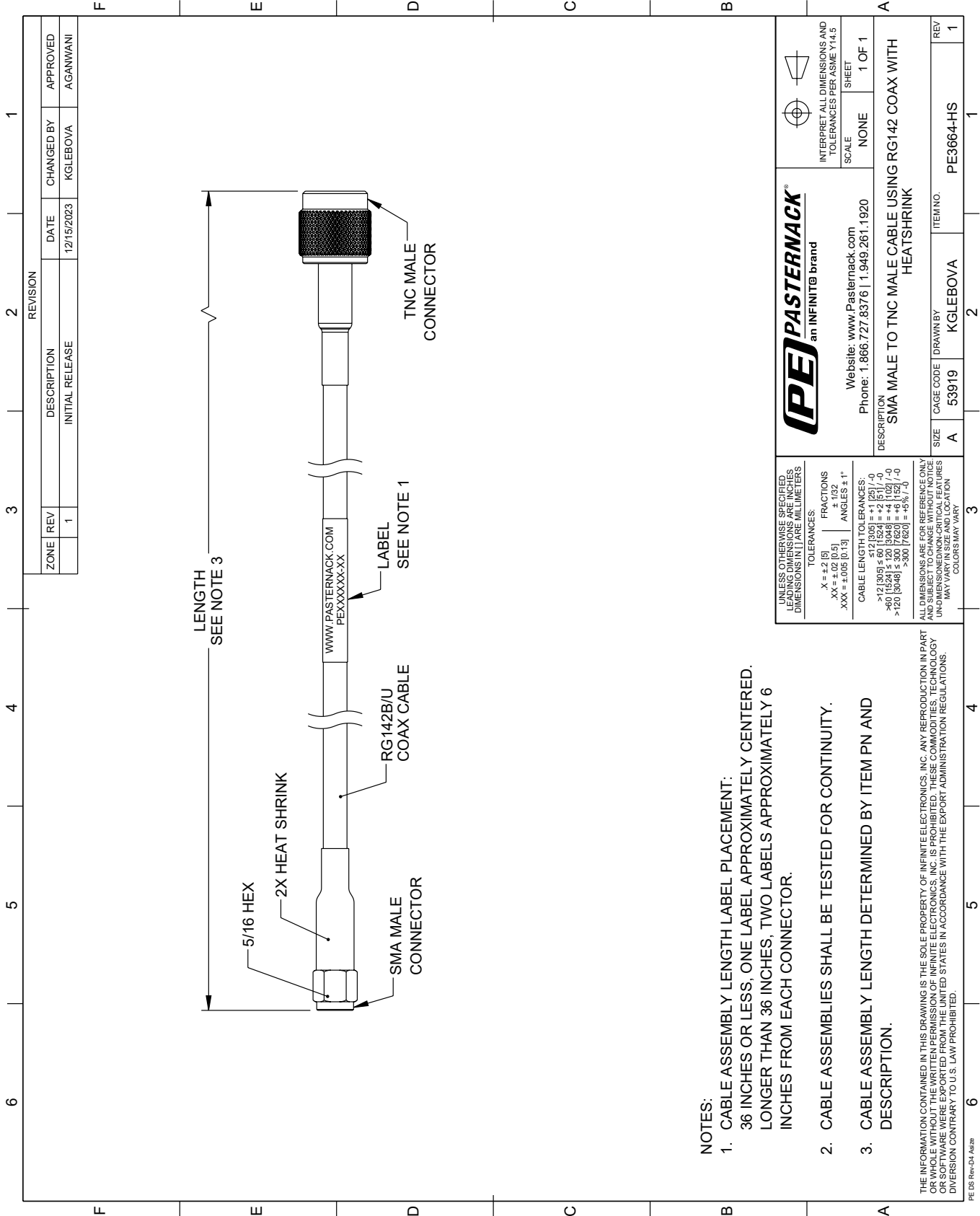
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Male Cable Using RG142 Coax with HeatShrink PE3664/HS](#)

URL: <https://www.pasternack.com/sma-male-to-tnc-male-cable-using-rg142-with-heatshrink-pe3664-hs-p.aspx>

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# PE3664/HS CAD Drawing

SMA 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.

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PE DS Rev-04 Add2

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	1			AGANWANI

 an INFINITE brand		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: SMA MALE TO TNC MALE CABLE USING RG142 COAX WITH HEATSHRINK			
SIZE	A	CAGE CODE	53919
DRAWN BY	KGLEBOVA		ITEM NO.
REV	1		PE3664-HS

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]      FRACTIONS ± 1/32  
 .XX = ±.02 [0.5]      ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.