

SMA Male to TNC Male Cable Using RG316 Coax with HeatShrink

PE3174/HS

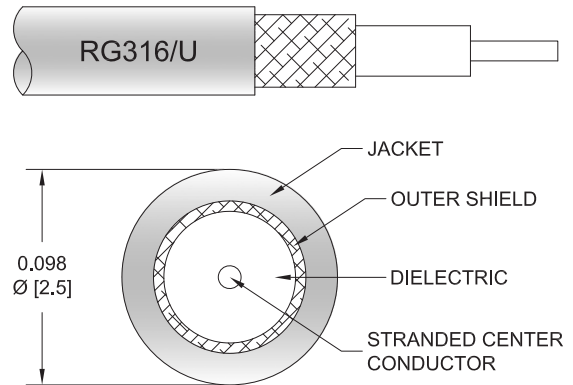


Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: RG316
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3174/HS SMA male to TNC male cable using RG316 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 RG316 coax. The PE3174/HS SMA male to TNC male cable assembly operates to 3 GHz.

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		69		%
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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PE3174/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3174/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
PE3174/HS-12	12 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.58	0.78	dB	0.057
PE3174/HS-24	24 inch	Insertion Loss (Typ.)	0.42	0.52	0.68	0.96	1.36	dB	0.068
PE3174/HS-36	36 inch	Insertion Loss (Typ.)	0.53	0.68	0.92	1.34	1.94	dB	0.078
PE3174/HS-48	48 inch	Insertion Loss (Typ.)	0.64	0.84	1.16	1.72	2.52	dB	0.088
PE3174/HS-72	72 inch	Insertion Loss (Typ.)	0.86	1.16	1.63	2.48	3.68	dB	0.108

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:	0.057 pounds
Additional Weight per Inch:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Weight	0.057 lbs [25.85 g]
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Cable

Cable Type	RG316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	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
Hex Size	5/16 inch	
Torque	5 in-lbs 0.57 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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PE3174/HS



Typical Performance Data

How to Order

Part Number Configuration:

PE3174/HS - xx uu

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

Length

Base Number

Example: PE3174/HS-12 = 12 inches long cable
PE3174/HS-100cm = 100 cm long cable

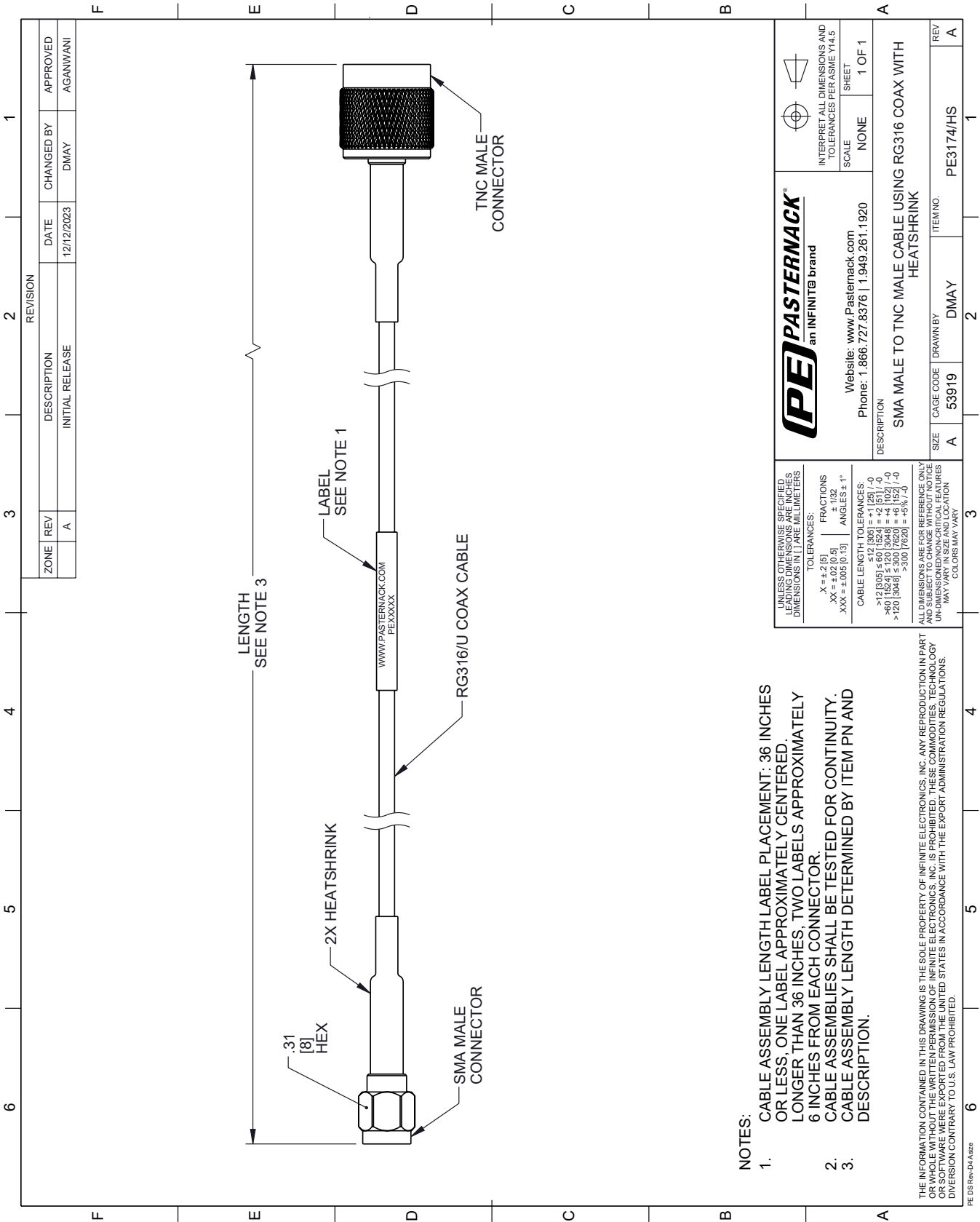
SMA Male to TNC Male Cable Using RG316 Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 RG316 Coax with HeatShrink PE3174/HS](#)

URL: <https://www.pasternack.com/sma-male-to-tnc-male-cable-using-rg316-with-heatshrink-pe3174-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.

PE3174/HS CAD Drawing
SMA Male to TNC Male Cable Using RG316 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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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		TOLERANCES:		FRACTIONS	
.X = ±.2 [5]		.XX = ±.02 [0.5]		±.1 [2]	
.XXX = ±.005 [0.13]		ANGLES ± 1°			
CABLE LENGTH TOLERANCES:					
≤12 [305] = +.1 [25] / -0					
>12 [305] ≤60 [1524] = +.2 [51] / -0					
>60 [1524] ≤120 [3048] = +.3 [762] / -0					
>120 [3048] ≤300 [7620] = +.5 [127] / -0					
>300 [7620] = +.5% / -0					
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY IN SIZE AND LOCATION COLORS MAY VARY					

			
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5		SCALE	
SHEET		1 OF 1	

PE PASTERNAK® an INFINIT® brand		Website: www.Pasternack.com		Phone: 1.866.727.8376 1.949.281.1920	
DESCRIPTION		SMA MALE TO TNC MALE CABLE USING RG316 COAX WITH HEATSHRINK			
SIZE	A	CAGE CODE	53919	DRAWN BY	DMAY
ITEM NO.	PE3174/H5				
REV	A				

		Website: www.Pasternack.com		Phone: 1.866.727.8376 1.949.261.1920	
SMA MALE TO TNC MALE CABLE USING RG316 COAX WITH HEATSHRINK		CAGE CODE		DRAWN BY	
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