

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



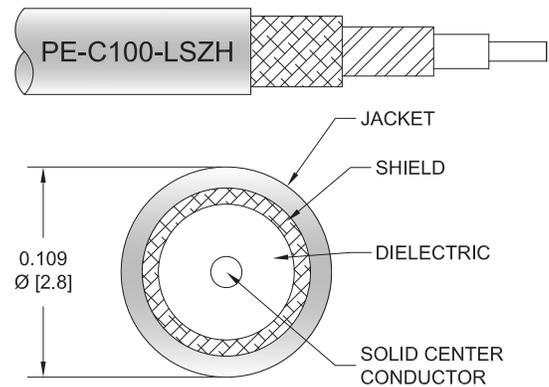
PE3W14768/HS

Configuration

- Connector 1: TNC Female Bulkhead
- Connector 2: SMA Male Right Angle
- Cable Type: PE-C100-LSZH
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- LSZH Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14768/HS TNC female bulkhead to SMA male right angle cable using PE-C100-LSZH 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 SMA cable assembly has a female to male gender configuration with 50 ohm flexible PE-C100-LSZH coax. The PE3W14768/HS TNC female to SMA male cable assembly operates to 1 GHz. The right angle SMA interface on the PE-C100-LSZH cable allows for easier connections in tight spaces. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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		1	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.62 [5.31]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



PE3W14768/HS

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W14768/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.051	0.07	0.115	0.167	0.24	dB/ft	
			0.17	0.23	0.38	0.55	0.79	dB/m	
PE3W14768/HS-12	12 In	Insertion Loss (Typ.)	0.36	0.37	0.42	0.47	0.54	dB	0.071
PE3W14768/HS-24	24 In	Insertion Loss (Typ.)	0.41	0.44	0.53	0.64	0.78	dB	0.082
PE3W14768/HS-36	36 In	Insertion Loss (Typ.)	0.46	0.51	0.65	0.81	1.02	dB	0.092
PE3W14768/HS-48	48 In	Insertion Loss (Typ.)	0.51	0.58	0.76	0.97	1.26	dB	0.102
PE3W14768/HS-60	60 In	Insertion Loss (Typ.)	0.56	0.65	0.88	1.14	1.5	dB	0.112

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: 0.2 dB
- Base Weight: 0.071 pounds
- Additional Weight per Inch: 0.00084 pounds

Mechanical Specifications

Cable Assembly

- Width/Diameter 0.5 in [12.7 mm]
- Weight 0.061 lbs [27.67 g]

Cable

- Cable Type PE-C100-LSZH
- Impedance 50 Ohms
- Inner Conductor Type Solid
- Inner Conductor Material and Plating Copper Clad Steel
- Dielectric Type PE
- Number of Shields 2
- Shield Layer 1 Aluminum Tape
- Shield Layer 2 Tinned Copper Braid
- Jacket Material LSZH, Black
- Jacket Diameter 0.109 in [2.77 mm]
- One Time Minimum Bend Radius 0.25 in [6.35 mm]
- Repeated Minimum Bend Radius 1 in [25.4 mm]
- Bending Moment 0.1 lbs-ft [0.14 N-m]
- Flat Plate Crush 10 lbs/in [0.18 Kg/mm]
- Tensile Strength 15 lbs [6.8 Kg]

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



PE3W14768/HS

Connectors

Description	Connector 1	Connector 2
Type	TNC Female Bulkhead	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 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
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



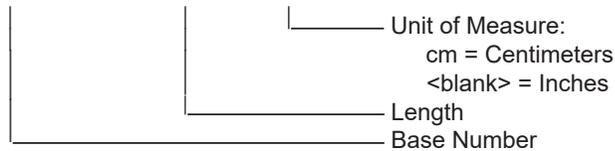
PE3W14768/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W14768/HS - xx uu



Example: PE3W14768/HS-12 = 12 inches long cable
PE3W14768/HS-100cm = 100 cm long cable

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH 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.

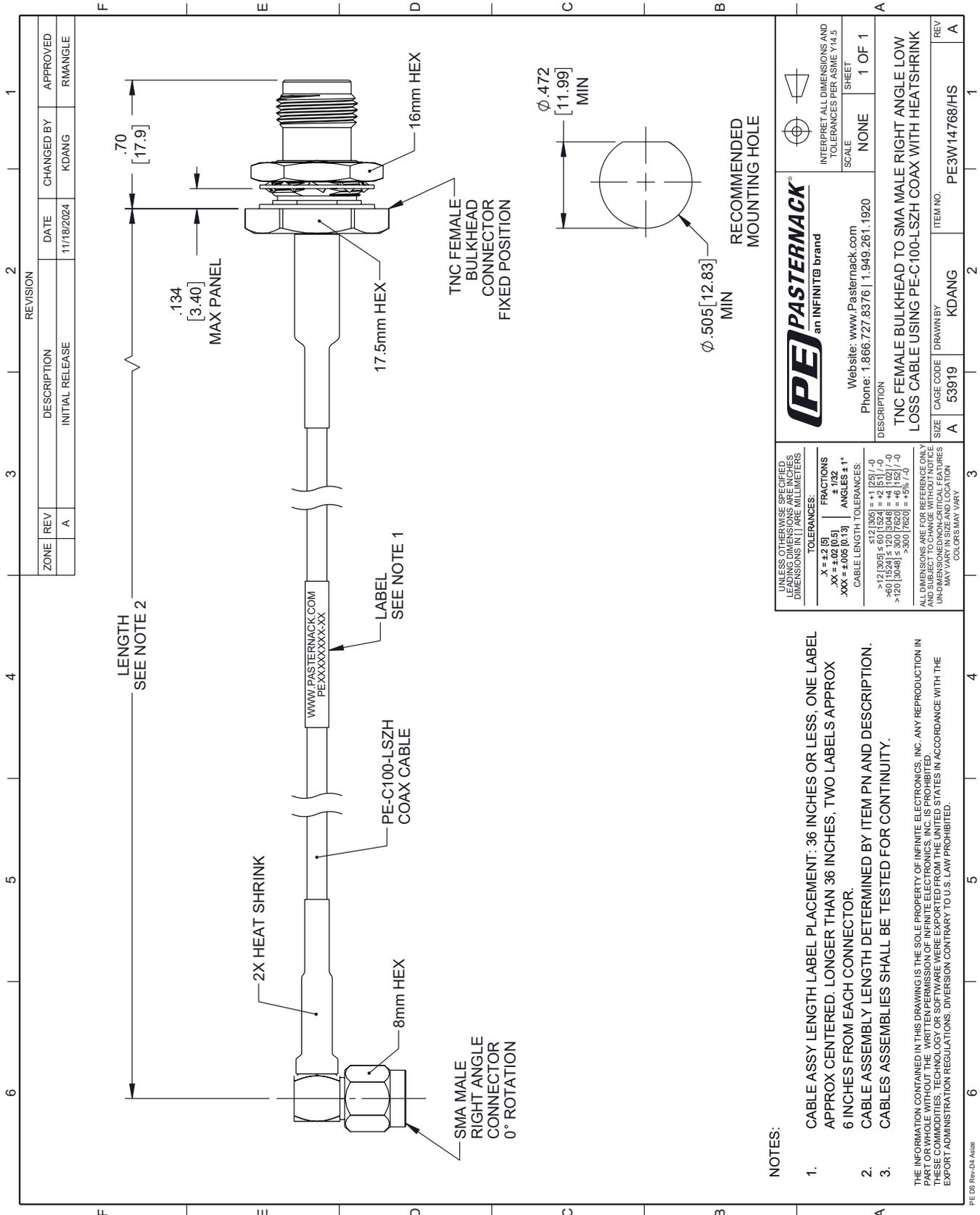
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink PE3W14768/HS](#)

URL: <https://www.pasternack.com/tnc-female-bulkhead-to-sma-male-low-loss-cable-using-pe-c100-lszh-with-heatshrink-pe3w14768-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.

PE3W14768/HS CAD Drawing

TNC Female Bulkhead to SMA Male Right Angle Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	11/18/2024	KDANG	RMANGLE

PE PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
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: TNC FEMALE BULKHEAD TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING PE-C100-LSZH COAX WITH HEATSHRINK

ITEM NO. PE3W14768/HS

SIZE A CAGE CODE 53919 DRAWN BY KDANG

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

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 ANGLES ± 1°
 CABLE LENGTH TOLERANCES:
 ≤ 12 [305] ± .60 [15.24] = ± 2 [51] / -0
 > 12 [305] ± 6.0 [152.4] = ± 4 [102] / -0
 > 20 [508] ± 3.0 [76.2] = ± 5% / -0
 > 30 [762] ± 3.0 [76.2] = ± 5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY

- NOTES:**
- CABLE ASSY LENGTH LABEL PLACEMENT: .36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN .36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.