

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



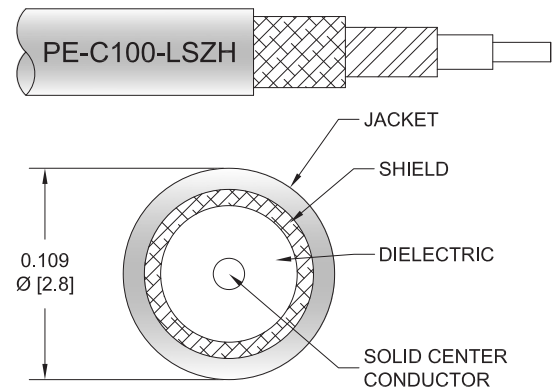
PE3C5747/HS

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Female Bulkhead
- 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 PE3C5747/HS TNC male to TNC female bulkhead 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 TNC cable assembly has a male to female gender configuration with 50 ohm flexible PE-C100-LSZH coax. The PE3C5747/HS TNC male to TNC female cable assembly operates to 1 GHz. 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]
Operating Voltage (AC)			500	Vrms

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



PE3C5747/HS

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C5747/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	
PE3C5747/HS-12	12 In	Insertion Loss (Typ.)	0.26	0.27	0.32	0.37	0.44	dB	0.09
PE3C5747/HS-24	24 In	Insertion Loss (Typ.)	0.31	0.34	0.43	0.54	0.68	dB	0.101
PE3C5747/HS-36	36 In	Insertion Loss (Typ.)	0.36	0.41	0.55	0.71	0.92	dB	0.111
PE3C5747/HS-48	48 In	Insertion Loss (Typ.)	0.41	0.48	0.66	0.87	1.16	dB	0.121
PE3C5747/HS-60	60 In	Insertion Loss (Typ.)	0.46	0.55	0.78	1.04	1.4	dB	0.131

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:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.08 lbs [36.29 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 Male to TNC Female Bulkhead Low Loss Cable
Using PE-C100-LSZH Coax with HeatShrink



PE3C5747/HS

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female Bulkhead
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	
Coupling Nut Plating Specification	100 µin minimum	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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



PE3C5747/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3C5747/HS - xx uu



Example: PE3C5747/HS-12 = 12 inches long cable
PE3C5747/HS-100cm = 100 cm long cable

TNC Male to TNC Female Bulkhead 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.

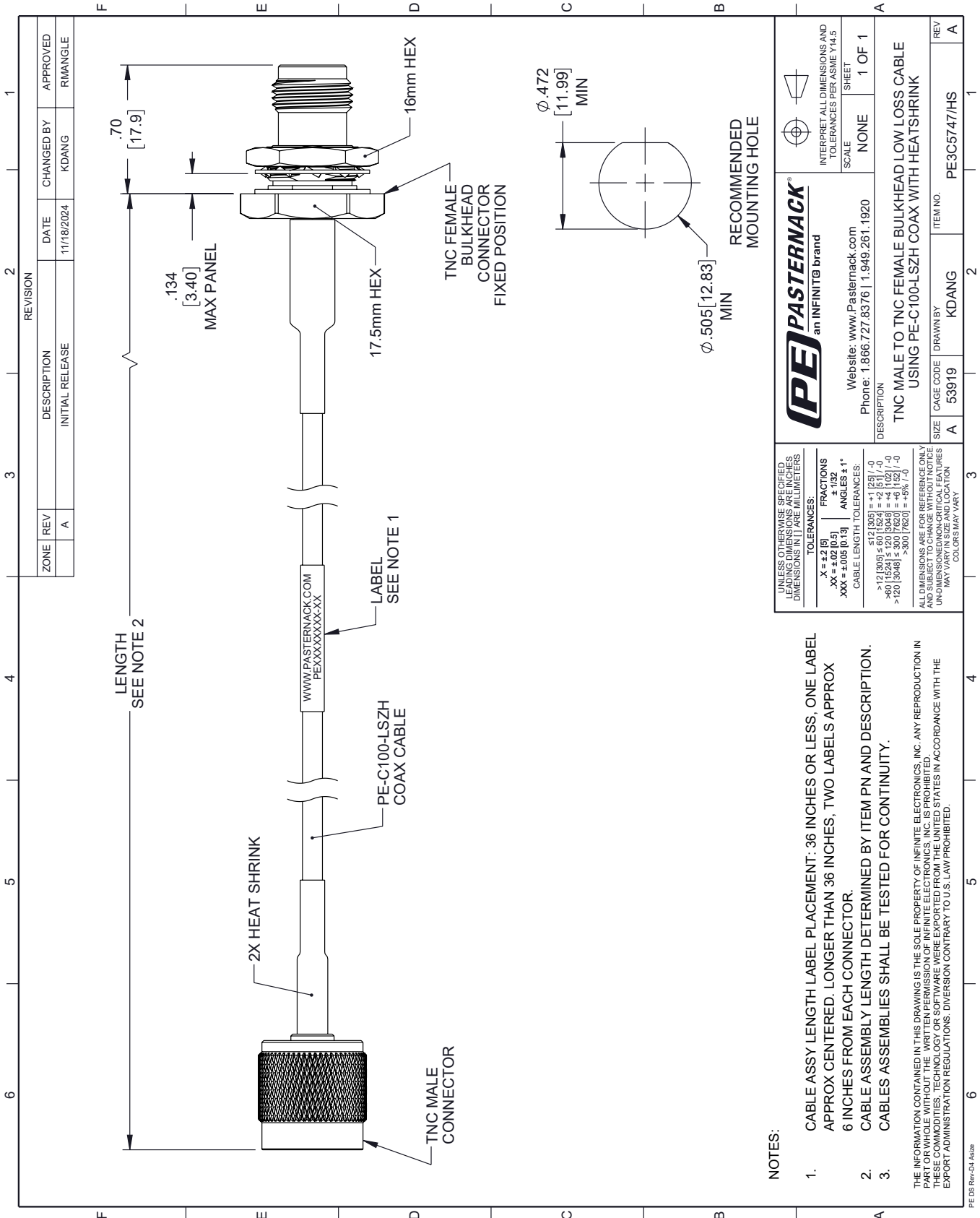
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Female Bulkhead Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink PE3C5747/HS](#)

URL: <https://www.pasternack.com/tnc-male-to-tnc-female-bulkhead-low-loss-cable-using-pe-c100-lszh-with-heatshrink-pe3c5747-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 impliment 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.

PE3C5747/HS CAD Drawing

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



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

PE PASTERNAK
an INFINITB brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION: TNC MALE TO TNC FEMALE BULKHEAD LOW LOSS CABLE USING PE-C100-LSZH COAX WITH HEATSHRINK

SCALE: NONE
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, UNLESS INDICATED OTHERWISE. DIMENSIONS IN [] ARE MILLIMETERS.	TOLERANCES: X = ±.2 [5] .XX = ±.02 [0.5] XXX = ±.005 [0.13]	FRACTIONS ± 1/32 ANGLES ± 1°
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.	CABLE LENGTH TOLERANCES: ≤ 12 [305] ± .60 [15.24] = +.1 [2.5] / -0 > 12 [305] ≤ 60 [1524] = +.4 [10.27] / -0 > 60 [1524] ≤ 120 [3048] = +.4 [10.27] / -0 > 120 [3048] ≤ 300 [7620] = +.5% / -0	

SIZE: A
CAGE CODE: 53919
DRAWN BY: KDANG
ITEM NO.: PE3C5747/HS

REV: A

NOTES:

1. 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.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. 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.