

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



PE3W10848/HS

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: PE-C100-LSZH
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- LSZH Jacket

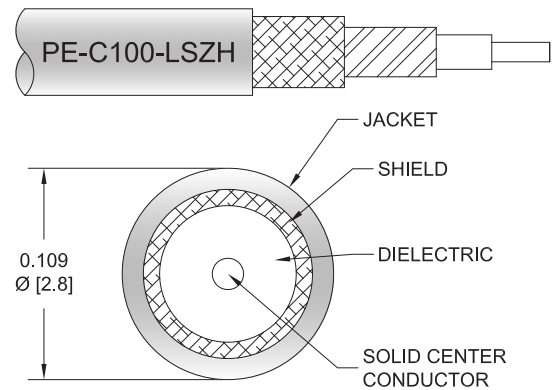
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W10848/HS TNC male to TNC male 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 male gender configuration with 50 ohm flexible PE-C100-LSZH coax. The PE3W10848/HS TNC 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		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]
Dielectric Withstanding Voltage (AC)			1,000	Vrms

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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	
PE3W10848/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.115	0.167	0.24	0.405	0.66	dB/ft	
			0.38	0.55	0.79	1.33	2.17	dB/m	
PE3W10848/HS-12	12 In	Insertion Loss (Typ.)	0.32	0.37	0.44	0.61	0.86	dB	0.096
PE3W10848/HS-24	24 In	Insertion Loss (Typ.)	0.43	0.54	0.68	1.01	1.52	dB	0.107
PE3W10848/HS-36	36 In	Insertion Loss (Typ.)	0.55	0.71	0.92	1.42	2.18	dB	0.117
PE3W10848/HS-48	48 In	Insertion Loss (Typ.)	0.66	0.87	1.16	1.82	2.84	dB	0.127
PE3W10848/HS-60	60 In	Insertion Loss (Typ.)	0.78	1.04	1.4	2.23	3.5	dB	0.137

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:	0.096 pounds
Additional Weight per Inch:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.086 lbs [39.01 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]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	15 µin minimum	15 µin minimum
Dielectric Type	Teflon	Teflon
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
Seal Gasket Material	Silicone	Silicone

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 Male Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink



PE3W10848/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W10848/HS - xx uu



Example: PE3W10848/HS-12 = 12 inches long cable
PE3W10848/HS-100cm = 100 cm long cable

TNC Male to TNC Male 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.

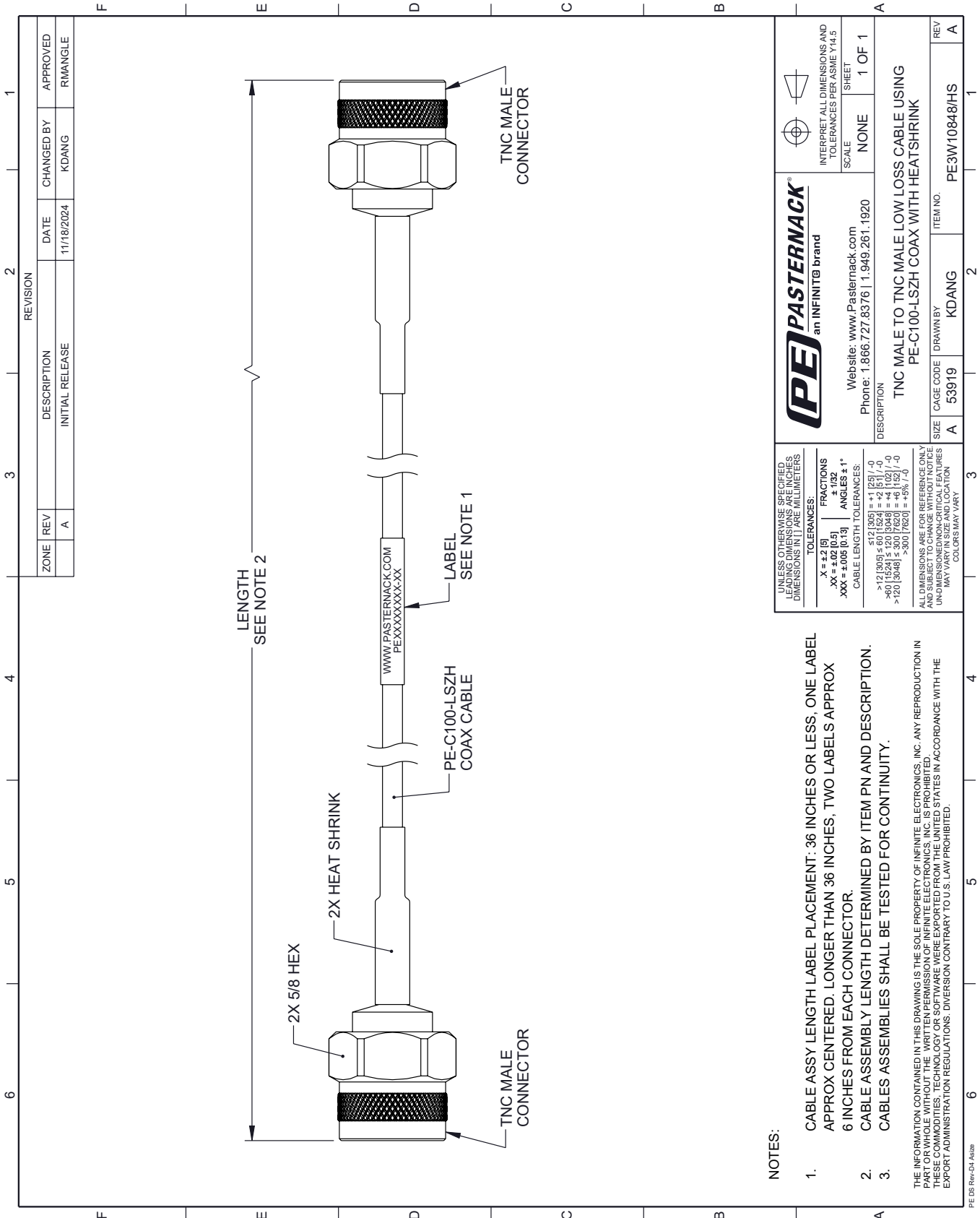
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Male Low Loss Cable Using PE-C100-LSZH Coax with HeatShrink PE3W10848/HS](https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-cable-using-pe-c100-lszh-with-heatshrink-pe3w10848-hs)

URL: <https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-cable-using-pe-c100-lszh-with-heatshrink-pe3w10848-hs-p.aspx>

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PE3W10848/HS CAD Drawing

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



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

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°
 ± 1/32

CABLE LENGTH TOLERANCES:
 <12 [305] ±.60 [1524] = ±.2 [5.1] / -0
 >12 [305] ±.60 [1524] = ±.2 [5.1] / -0
 >40 [1024] ±.120 [3048] = ±.4 [1027] / -0
 >120 [3048] ±.300 [7620] = ±.93 [23.1] / -0

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

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE SHEET 1 OF 1

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

ITEM NO. PE3W10848/HS

CAGE CODE 53919 DRAWN BY KDANG

- 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.
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