



**TNC Male Right Angle to TNC Female Bulkhead Cable
48 Inch Length Using LMR-195 Coax with HeatShrink**

RF Cable Assemblies Technical Data Sheet

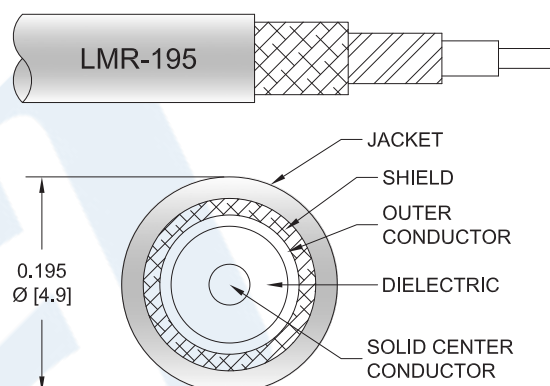
PE3C3658/HS-48

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: TNC Female Bulkhead
- Cable Type: LMR-195

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C3658/HS-48 TNC male right angle to TNC female bulkhead 48 inch cable using LMR-195 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 LMR-195 coax. The PE3C3658/HS-48 TNC male to TNC female cable assembly operates to 3 GHz. The right angle TNC interface on the LMR-195 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink PE3C3658/HS-48](#)



TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C3658/HS-48

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.45:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω/1000ft [Ω/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	0.41	0.44	0.48	0.58	0.98	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.2 dB for the TNC Male connector and 0.1 dB for the TNC Female connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.689 in [17.5 mm]

Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink PE3C3658/HS-48](#)



TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C3658/HS-48

One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle	TNC Female Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
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

Temperature

Operating Range	-40 to +85 deg C
-----------------	------------------

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

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink PE3C3658/HS-48](#)



TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C3658/HS-48

How to Order

Part Number Configuration:

PE3C3658/HS

- xx

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C3658/HS-12 = 12 inches long cable
PE3C3658/HS-100cm = 100 cm long cable

TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 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 Right Angle to TNC Female Bulkhead Cable 48 Inch Length Using LMR-195 Coax with HeatShrink PE3C3658/HS-48](https://www.pasternack.com/tnc-male-tnc-female-lmr195-cable-assembly-pe3c3658-hs-48-p.aspx)

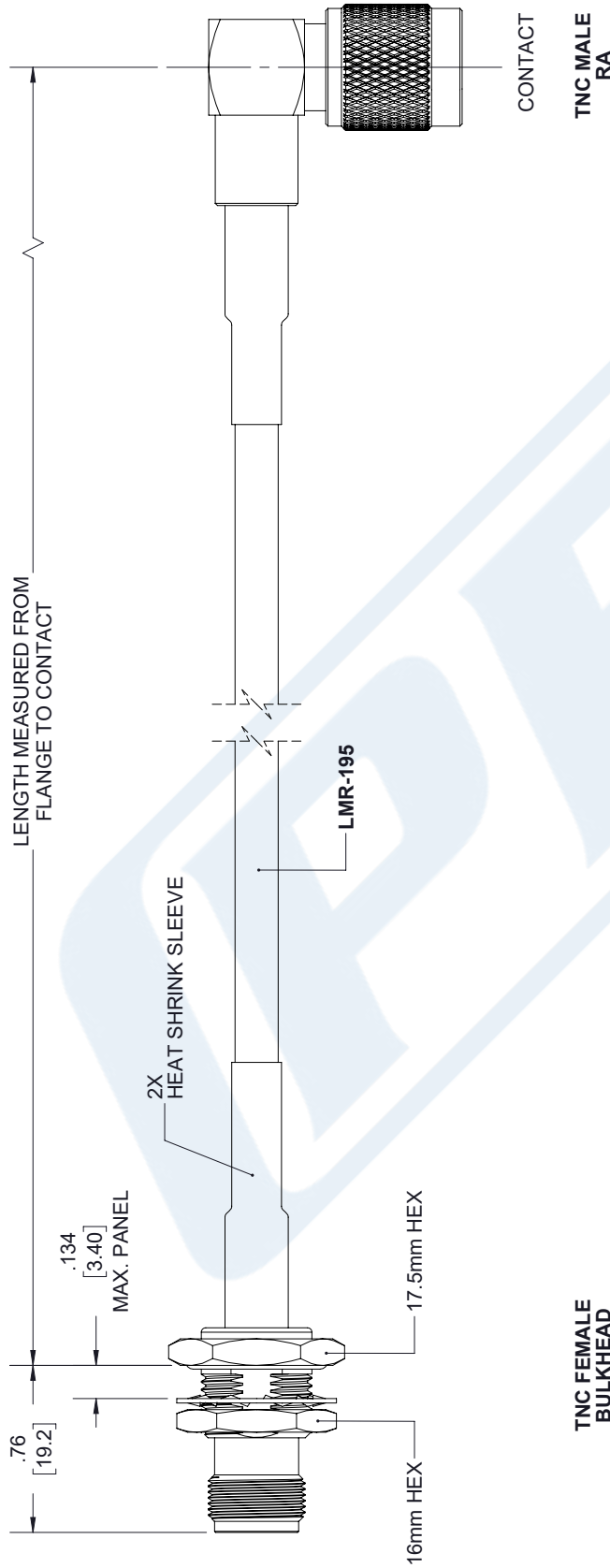
URL: <https://www.pasternack.com/tnc-male-tnc-female-lmr195-cable-assembly-pe3c3658-hs-48-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE3C3658/HS-48 CAD Drawing

TNC Male Right Angle to TNC Female Bulkhead Cable 48 Inch
Length Using LMR-195 Coax with HeatShrink

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/20/2020	SELLIS



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

TOLERANCES:

.X = ± .2	[5.08]	FRACTIONS
.XX = ± .02	[.51]	± 1/32
.XXX = ± .005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	= +1 [25] / -0
12 [305] < L ≤ 60 [1524]	= +2 [51] / -0
60 [1524] < L ≤ 120 [3048]	= +4 [102] / -0
120 [3048] < L ≤ 300 [7620]	= +6 [152] / -0
300 [7620] < L = +5% L / -0	

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITI brand

Pasternack Enterprises, Inc.
P.O. Box 16759, Irvine, CA 92623.
Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

THE INFORMATION AND
DESIGN IN THIS DOCUMENT
IS THE PROPERTY OF
PASTERNAK CORPORATION
ALL RIGHTS RESERVED.

SHEET	1	OF	1
SCALE	N/A		

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3C3658/HS

REV	A
-----	---

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.