



TNC Male to SMA Male Cable Using LMR-100 Coax in 48 Inch

RF Cable Assemblies Technical Data Sheet

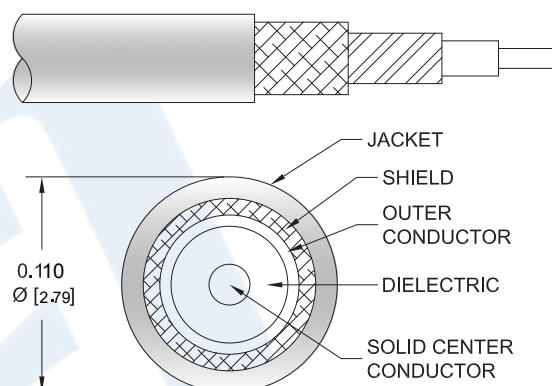
PE3C0114/HS-48

Configuration

- Connector 1: TNC Male
- Connector 2: SMA Male
- Cable Type: LMR-100A

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0114/HS-48 TNC male to SMA male 48 inch cable using LMR-100 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 male to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3C0114/HS-48 TNC male to SMA male cable assembly operates to 5.8 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.

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 SMA Male Cable Using LMR-100 Coax in 48 Inch PE3C0114/HS-48](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.35	0.42	0.51	0.71	1.01	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.6 in [15.24 mm]

Cable

Cable Type	LMR-100A
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	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]

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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]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Silver	Stainless Steel
Coupling Nut Material and Plating	Brass, Silver	Stainless Steel

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3C0114/HS-48

How to Order

Part Number Configuration:

PE3C0114/HS - xx uu

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

Example: PE3C0114/HS-12 = 12 inches long cable
PE3C0114/HS-100cm = 100 cm long cable

TNC Male to SMA Male Cable Using LMR-100 Coax in 48 Inch 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.

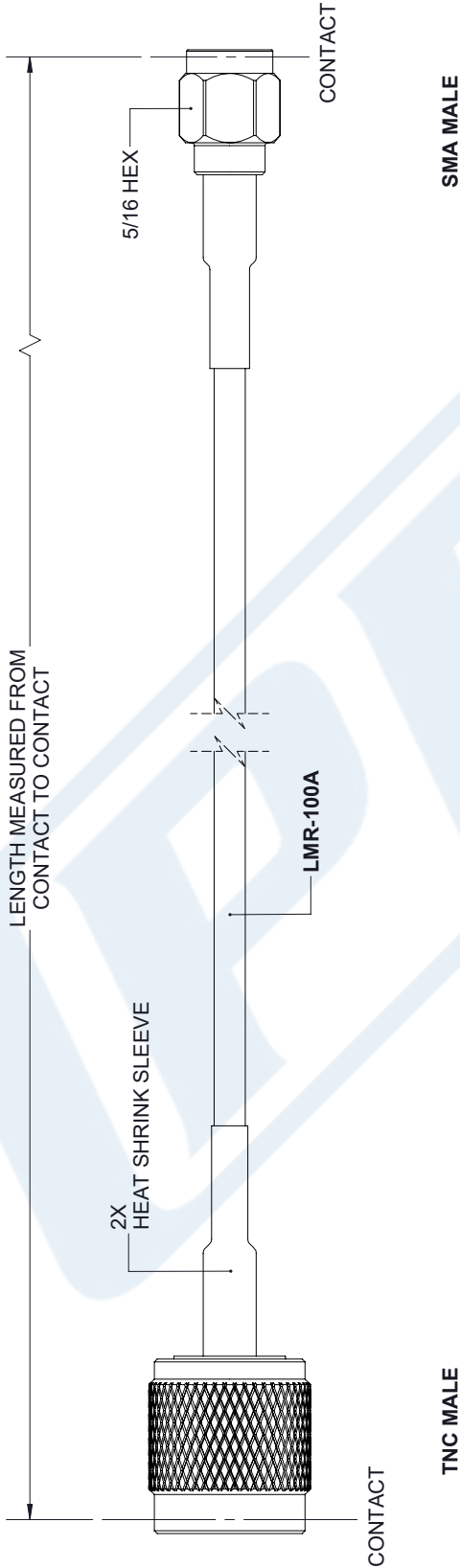
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to SMA Male Cable Using LMR-100 Coax in 48 Inch PE3C0114/HS-48](https://www.pasternack.com/tnc-male-sma-male-lmr100-cable-assembly-pe3c0114-hs-48-p.aspx)

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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.

PE3C0114/HS-48 CAD Drawing
TNC Male to SMA Male Cable Using LMR-100 Coax in 48 Inch

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/9/2020	SELLIS



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

TOLERANCES:

.X = ± .2	[.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% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITI brand

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DESIGN IN THIS DOCUMENT
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SHEET	1	OF	1
SCALE	N/A		
REV	A		

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3C0114/HS

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