



TNC Male to TNC Male Flexible Cable 50 CM
Length Using RG174 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C7891-50CM

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: RG174

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket

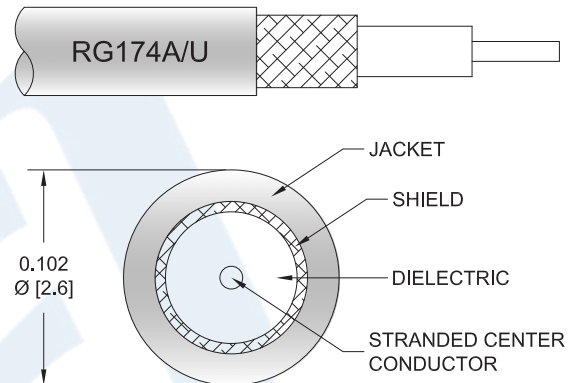
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C7891-50CM TNC male to TNC male 50 cm cable using RG174 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 RG174 coax. The PE3C7891-50CM TNC male to TNC male cable assembly operates to 1 GHz.

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 TNC Male Flexible Cable 50 CM Length Using RG174 Coax with HeatShrink PE3C7891-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Input Power (Average)			17	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.13	0.21	0.33	0.49	0.73	dB

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.6 in [15.24 mm]

Cable

Cable Type	RG174
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	15 µin	15 µin
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin	100 µin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin	100 µin

Environmental Specifications

Temperature

Operating Range

-40 to +80 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3C7891

- **xx**

uu

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

Example: PE3C7891-12 = 12 inches long cable
PE3C7891-100cm = 100 cm long cable

TNC Male to TNC Male Flexible Cable 50 CM Length Using RG174 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.

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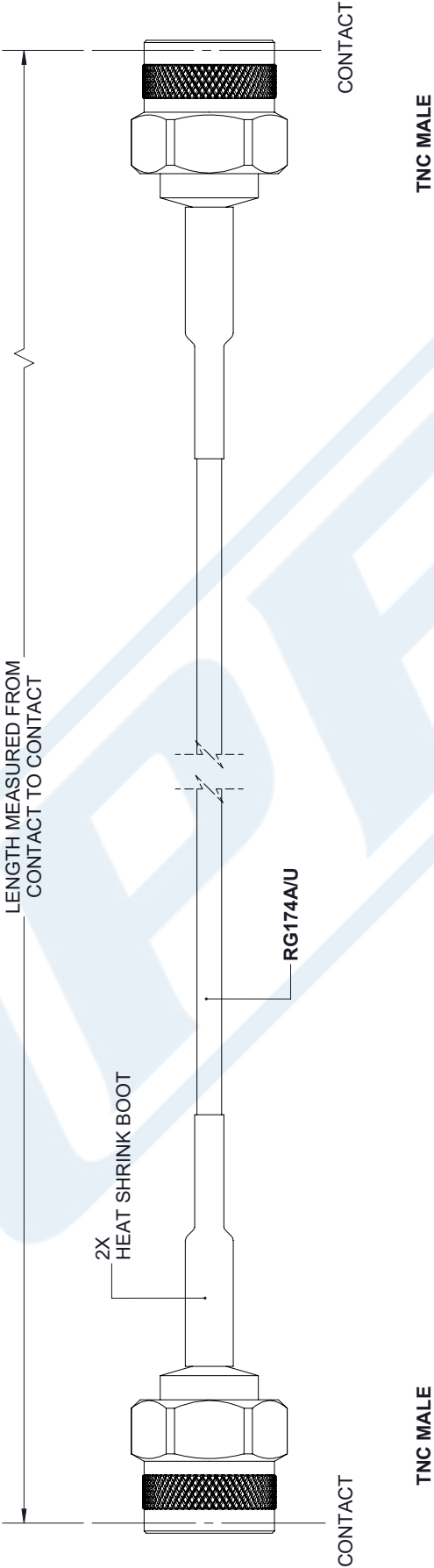
URL: <https://www.pasternack.com/tnc-male-tnc-male-rg174au-cable-assembly-pe3c7891-50cm-p.aspx>

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.

PE3C7891-50CM CAD Drawing

TNC Male to TNC Male Flexible Cable 50 CM Length Using RG174 Coax with HeatShrink

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/14/2021	SELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
.X = ± .2	[5.08]
.XX = ± .02	[.51]
.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	
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SIZE	A
CAGE CODE	53919
DRAWN BY	K.DANG
ITEM NO.	PE3C7891
REV	A

THIRD-ANGLE PROJECTION	
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SHEET	1 OF 1
SCALE	N/A

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