

N Male to N Male Low Loss Cable 100 CM Length Using LMR-600-UF Coax Using Times Microwave Components with HeatShrink



RF Cable Assemblies Technical Data Sheet

PE3C7615-100CM

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-600-UF

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 87% Phase Velocity
- Double Shielded
- Thermoplastic Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C7615-100CM type N male to type N male 100 cm cable using LMR-600-UF 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-600-UF coax. The PE3C7615-100CM type N male to type N 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: [N Male to N Male Low Loss Cable 100 CM Length Using LMR-600-UF Coax Using Times Microwave Components with HeatShrink PE3C7615-100CM](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		87		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.43 [1.41]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ω/1000ft [Ω/Km]
Dielectric Withstanding Voltage (AC)			2,500	Vrms
Dielectric Withstanding Voltage (DC)			4,000	Vdc
Jacket Spark			8,000	Vrms
Input Power (Peak)			40	KWatts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.15	0.22	0.31	0.49	0.77	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 $0.1 * \text{SQRT}(F\text{GHz})$ dB per connector loss.

Mechanical Specifications

Cable Assembly

Length*

39.37 in [100 cm]

Cable

Cable Type

LMR-600-UF

Impedance

50 Ohms

Inner Conductor Type

Stranded

Inner Conductor Material and Plating

Beryllium Copper

Dielectric Type

PE (F)

Number of Shields

2

Shield Layer 1

Aluminum Tape

Shield Layer 2

Tinned Copper Braid

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Jacket Material	Thermoplastic, Black
Jacket Diameter	0.59 in [14.99 mm]
One Time Minimum Bend Radius	1.5 in [38.1 mm]
Repeated Minimum Bend Radius	6 in [152.4 mm]
Bending Moment	1.75 lbs-ft [2.37 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	350 lbs [158.76 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μ in. minimum	50 μ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 μ in. minimum	100 μ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 μ in. minimum	100 μ in. minimum
Hex Size	20.57 mm	20.57 mm
Torque	44 in-lbs [4.97 Nm]	44 in-lbs [4.97 Nm]

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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How to Order

Part Number Configuration:

PE3C7615

- **xx**

uu

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

Example: PE3C7615-12 = 12 inches long cable
PE3C7615-100cm = 100 cm long cable

N Male to N Male Low Loss Cable 100 CM Length Using LMR-600-UF Coax Using Times Microwave Components 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/n-male-n-male-lmr-600-uf-cable-assembly-pe3c7615-100cm-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.

PE3C7615-100CM CAD Drawing

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REVISIONS					
REV.	DESCRIPTION	DATE	APPROVED		
A	INITIAL RELEASE	4/13/2021	S.SELLIS		



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		TOLERANCES:		THIRD-ANGLE PROJECTION	
X = ± 2 [5.08]	FRACTIONS XX = ± .02 [.51]	± 1/32	ANGLES ± 1°	THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.	
XXX = ± .005 [.13]	CABLE LENGTH (L) TOLERANCES:				
L ≤ 12 [305] = +1 [25] / -0	L ≤ 12 [305] < L ≤ 60 [1524] = +2 [51] / -0				
12 [305] < L ≤ 120 [3048] = +4 [102] / -0	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0				
120 [3048] < L ≤ 300 [7620] = +6 [153] / -0	300 [7620] < L = +5% L / -0				
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.					
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