

N Male to N Male Cable Using RG142 Coax



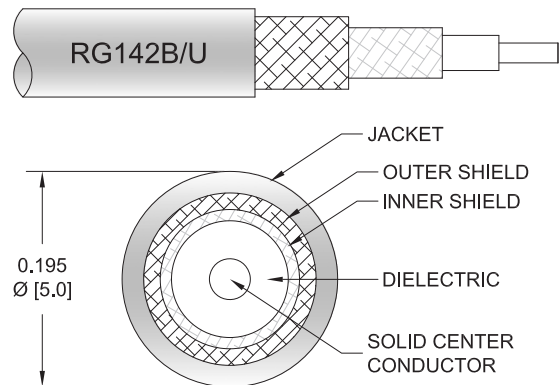
PE3C2255

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 69.2% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2255 type N male to type N male cable using RG142 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 RG142 coax. The PE3C2255 type N male to type N male cable assembly operates to 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		69.2		%
RF Shielding	90			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			1,500	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency						
PE3C2255	Custom Lengths Available	Insertion Loss (Typ.)	0.087	0.129	0.184	0.28	0.514	dB/ft	
			0.29	0.43	0.61	0.92	1.69	dB/m	
PE3C2255-12	12 inch	Insertion Loss (Typ.)	0.29	0.33	0.39	0.48	0.72	dB	0.178
PE3C2255-24	24 inch	Insertion Loss (Typ.)	0.38	0.46	0.57	0.76	1.23	dB	0.22
PE3C2255-36	36 inch	Insertion Loss (Typ.)	0.47	0.59	0.76	1.04	1.75	dB	0.262
PE3C2255-48	48 inch	Insertion Loss (Typ.)	0.55	0.72	0.94	1.32	2.26	dB	0.304
PE3C2255-60	60 inch	Insertion Loss (Typ.)	0.64	0.85	1.12	1.6	2.77	dB	0.346

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:	0.178 pounds
Additional Weight per Inch:	0.0035 pounds

Mechanical Specifications

Cable Assembly

Weight 0.178 lbs [80.74 g]

Cable

Cable Type	RG142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.984 in [24.99 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin	30 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	18 mm	18 mm
Torque	9 in-lbs 1.02 Nm	9 in-lbs 1.02 Nm

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

N Male to N Male Cable Using RG142 Coax



PE3C2255

Typical Performance Data

How to Order

Part Number Configuration:

PE3C2255

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C2255-12 = 12 inches long cable
PE3C2255-100cm = 100 cm long cable

N Male to N Male Cable Using RG142 Coax 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.

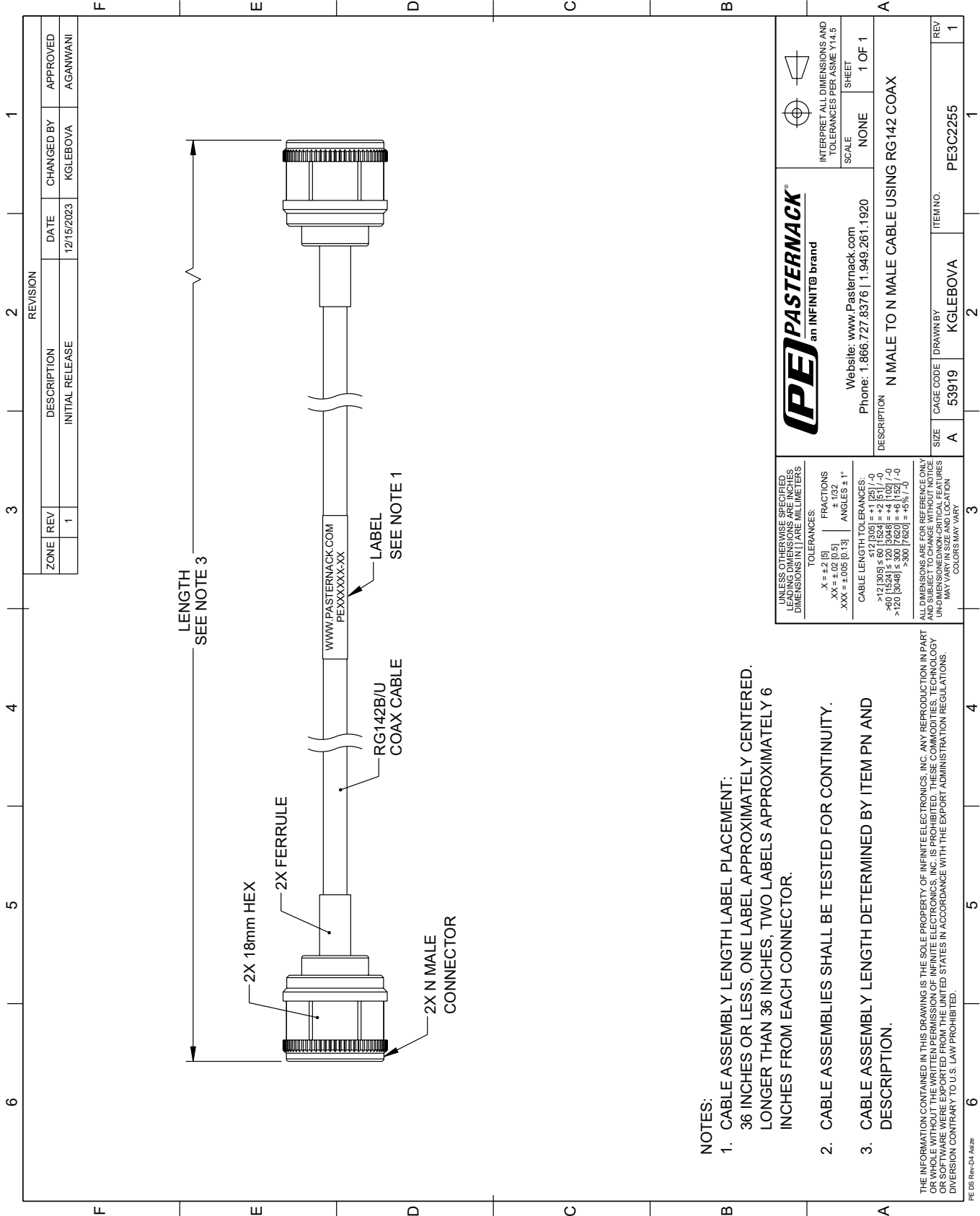
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Cable Using RG142 Coax PE3C2255](#)

URL: <https://www.pasternack.com/n-male-to-n-male-cable-using-rg142-pe3c2255-p.aspx>

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

PE3C2255 CAD Drawing

N Male to N Male Cable Using RG142 Coax



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	12/15/2023	KGLEBOVA	AGANWANI
DESCRIPTION		INITIAL RELEASE		

- NOTES:**
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. DIMENSIONS AND LOCATIONS MAY VARY IN SIZE AND COLOR. COLORS MAY VARY.

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SCALE: NONE SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: N MALE TO N MALE CABLE USING RG142 COAX

SIZE	A	CAGE CODE	53919	DRAWN BY	KGLEBOVA	ITEM NO.	PE3C2255
REV	1						

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