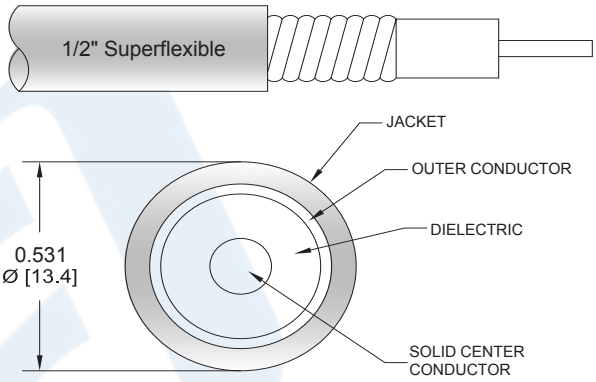
PASTERNACK®
THE ENGINEER'S RF SOURCE

N Male to N Male Low PIM Cable Using 1/2 inch Superflexible Coax

RF Cable Assemblies Technical Data Sheet PE37968

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: 1/2" Superflexible



Features

- Max Frequency 2.7 GHz
- Low PIM: -160 dBc Max
- 82% Phase Velocity
- PE Jacket

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE37968 type N male to type N male low PIM cable using 1/2 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated 1/2" superflexible coax. The PE37968 type N male to type N male cable assembly operates to 2.7 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

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		2.7	GHz
Return Loss			-26	dB
Velocity of Propagation		82		%
Passive Intermodulation			-160	dBc
Capacitance		24.4 [80.05]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.92 [3.02]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		1.13 [3.71]		Ω/1000ft [Ω/Km]

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 PIM Cable Using 1/2 inch Superflexible Coax PE37968

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2.2	2.7			GHz
Insertion Loss (Typ.)	0.032 [0.1]	0.05 [0.16]	0.056 [0.18]			dB/ft [dB/m]
Return Loss (Max.)	-30	-28	-26			dB

Electrical Specification Notes:
Insertion loss does not include the loss of the connectors.
Insertion loss is estimated as 0.05 x sqrt(fGHz) dB per connector.
Passive intermodulation is measured with two 20W tones.

Mechanical Specifications

Cable Assembly

Weight	0.0375 lbs [17.01 g]

Cable

Cable Type	1/2" Superflexible
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Outer Conductor Material and Plating	Helically Corrugated Copper Tube
Outer Conductor Diameter	0.484 in [12.29 mm]
Jacket Material	PE, Black
Jacket Diameter	0.531 in [13.49 mm]
One Time Minimum Bend Radius	0.59 in [14.99 mm]
Repeated Minimum Bend Radius	1.18 in [29.97 mm]
Typical Flex Cycles	20
Flat Plate Crush	85.6 lbs/in [1.53 Kg/mm]
Tensile Strength	225 lbs [102.06 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Silver	Brass, Silver
Body Material and Plating	Brass, Silver	Brass, Silver
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	19 mm	19 mm
Torque	9.7 in-lbs [1.1 Nm]	9.7 in-lbs [1.1 Nm]

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Environmental Specifications

Temperature

Operating Range	-40 to +80 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
- Values at 25°C, sea level.

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How to Order

Part Number Configuration: **PE37968 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE37968 — Base Number

Example: PE37968-12 = 12 inches long cable
PE37968-100cm = 100 cm long cable

N Male to N Male Low PIM Cable Using 1/2 inch Superflexible Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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 Low PIM Cable Using 1/2 inch Superflexible Coax PE37968

URL: https://www.pasternack.com/n-male-n-male-1-2-inch-helical-cable-assembly-pe37968-p.aspx

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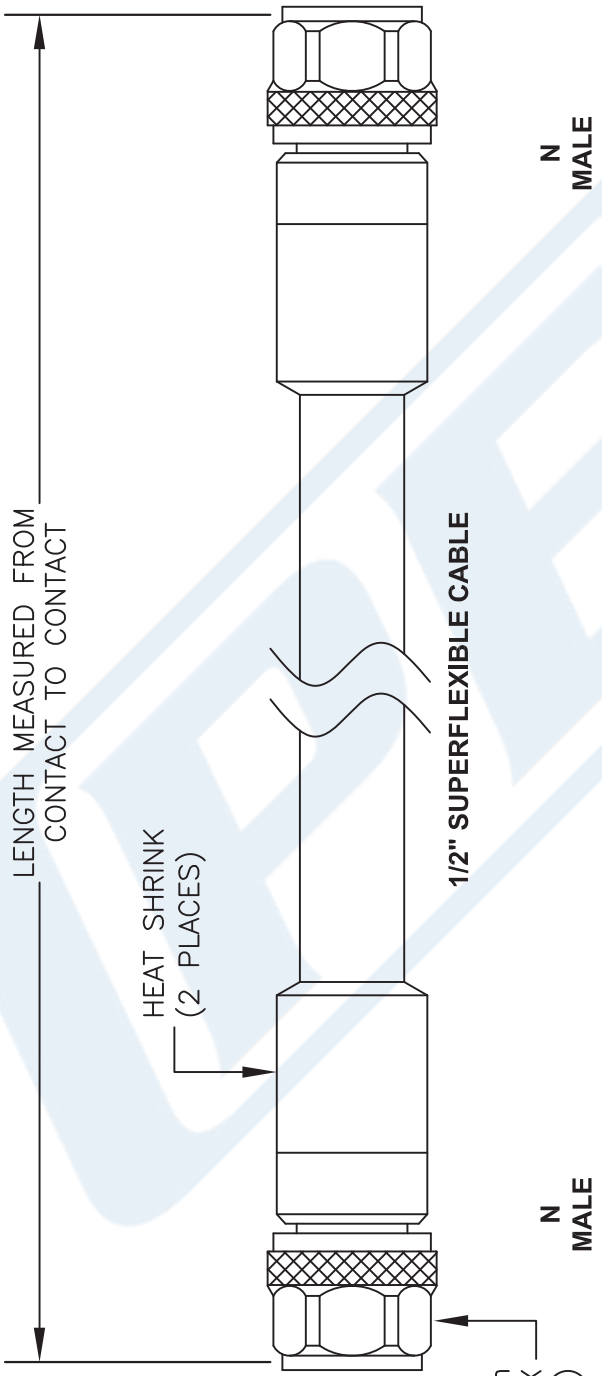
PE37968 CAD Drawing

N Male to N Male Low PIM Cable Using 1/2 inch Superflexible Coax



STANDARD TOLERANCES
.X ±0.2
.XX ±0.1
.XXX ±0.05

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE **PE37968**

CAD FILE 110816 | SCALE N/A | SIZE A | FSCM NO. 53919 | 41742

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