

N Male to SMA Male Low Loss Cable Using LMR-400 Coax

RF Cable Assemblies Technical Data Sheet

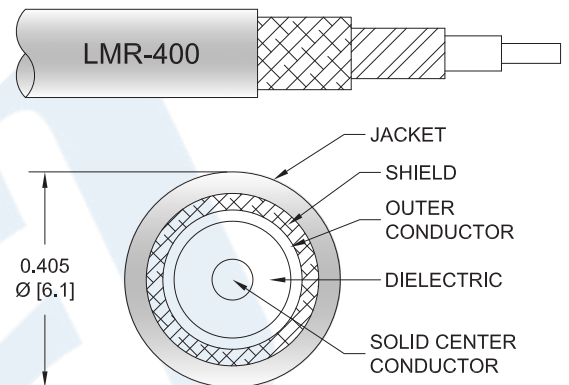
PE3C2114

Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: LMR-400

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2114 type N male to SMA male cable using LMR-400 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3C2114 type N 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: [N Male to SMA Male Low Loss Cable Using LMR-400 Coax PE3C2114](#)

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 85 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.2 [3.94] | | ns/ft [ns/m] |
| Capacitance | | 23.9 [78.41] | | pF/ft [pF/m] |
| Inductance | | 0.06 [0.2] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 1.39 [4.56] | | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor | | 1.65 [5.41] | | Ω/1000ft [Ω/Km] |
| Jacket Spark | | | 8,000 | 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.) | 0.02 | 0.029 | 0.041 | 0.068 | 0.108 | dB/ft |
| | 0.07 | 0.1 | 0.13 | 0.22 | 0.35 | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Diameter | 0.8 in [20.32 mm] |
| Weight | 0.12 lbs [54.43 g] |

Cable

| | |
|--------------------------------------|----------------------|
| Cable Type | LMR-400 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| Dielectric Type | PE (F) |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper Braid |
| Jacket Material | PE, Black |
| Jacket Diameter | 0.405 in [10.29 mm] |

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 SMA Male Low Loss Cable Using LMR-400 Coax PE3C2114](#)

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| | |
|------------------------------|------------------------|
| One Time Minimum Bend Radius | 1 in [25.4 mm] |
| Repeated Minimum Bend Radius | 4 in [101.6 mm] |
| Bending Moment | 0.5 lbs-ft [0.68 N-m] |
| Flat Plate Crush | 40 lbs/in [0.71 Kg/mm] |
| Tensile Strength | 160 lbs [72.57 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------------|------------------|
| Type | N Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50 μ in. minimum | 50μ" Min |
| Dielectric Type | PTFE | Teflon |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 150 μ in. minimum | |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 150 μ in. minimum | |
| Hex Size | 13/16 inch | |

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

Plotted and Other Data

Notes:

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 SMA Male Low Loss Cable Using LMR-400 Coax PE3C2114](#)

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PE3C2114

How to Order

Part Number Configuration:

PE3C2114

- **xx**

uu

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

Example: PE3C2114-12 = 12 inches long cable
PE3C2114-100cm = 100 cm long cable

N Male to SMA Male Low Loss Cable Using LMR-400 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 SMA Male Low Loss Cable Using LMR-400 Coax PE3C2114](#)

URL: <https://www.pasternack.com/n-male-sma-male-lmr400-cable-assembly-pe3c2114-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.

PE3C2114 CAD Drawing

N Male to SMA Male Low Loss Cable Using LMR-400 Coax

| REVISIONS | | |
|-----------|-----------------|----------------------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 4/12/2021 |
| | | APPROVED S. ELLIS |



| | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------|-------------|-----------|------------|-------|--------|--------------|-------|-------------|--------------|----------------|--------------------------|----------------|----------------------------|-----------------|-----------------------------|-----------------|----------------|----------------|---|---|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table style="width: 100%;"> <tr> <td>.X = ±.2</td> <td>[5.08]</td> <td>FRACTIONS</td> </tr> <tr> <td>.XX = ±.02</td> <td>[.51]</td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ±.005</td> <td>[.13]</td> <td>ANGLES ± 1°</td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</p> <table style="width: 100%;"> <tr> <td>L ≤ 12 [305]</td> <td>= +1 [25] / -0</td> </tr> <tr> <td>12 [305] < L ≤ 60 [1524]</td> <td>= +2 [51] / -0</td> </tr> <tr> <td>60 [1524] < L ≤ 120 [3048]</td> <td>= +4 [102] / -0</td> </tr> <tr> <td>120 [3048] < L ≤ 300 [7620]</td> <td>= +6 [152] / -0</td> </tr> <tr> <td>300 [7620] < L</td> <td>= +5% / L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | .X = ±.2 | [5.08] | FRACTIONS | .XX = ±.02 | [.51] | ± 1/32 | .XXX = ±.005 | [.13] | ANGLES ± 1° | 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 | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p> | <p>PE PASTERNAK an INFINITI brand</p> <p>Pasternack Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p> <p>ITEM NO. PE3C2114</p> <p>SIZE A CAGE CODE A 53919 DRAWN BY K.DANG</p> <p>REV A</p> |
| .X = ±.2 | [5.08] | FRACTIONS | | | | | | | | | | | | | | | | | | | |
| .XX = ±.02 | [.51] | ± 1/32 | | | | | | | | | | | | | | | | | | | |
| .XXX = ±.005 | [.13] | ANGLES ± 1° | | | | | | | | | | | | | | | | | | | |
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