



## N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM

### RF Cable Assemblies Technical Data Sheet

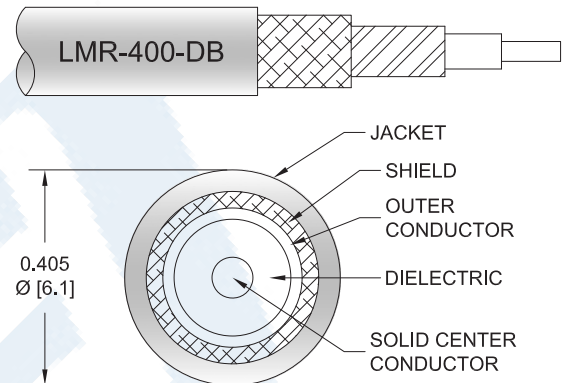
**PE3C9301-100CM**

#### Configuration

- Connector 1: N Male
- Connector 2: UHF Male
- Cable Type: LMR-400-DB

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C9301-100CM type N male to UHF male cable using LMR-400-DB 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 UHF cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-DB coax. The PE3C9301-100CM type N male to UHF male cable assembly operates to 3 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 UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM PE3C9301-100CM](#)



## N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM

### RF Cable Assemblies Technical Data Sheet

**PE3C9301-100CM**

#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 3       | GHz             |
| VSWR                          |         |              | 1.5:1   |                 |
| 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             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Typ.) | 0.18 | 0.22 | 0.27 | 0.34 | 0.52 | dB/ft |
|                       | 0.59 | 0.72 | 0.89 | 1.12 | 1.71 | dB/m  |

#### 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 db for N connector and 0.1 x SQRT(FGHz) dB for the UHF connector.

#### Mechanical Specifications

##### Cable Assembly

|         |                      |
|---------|----------------------|
| Length* | 39.37 in [100 cm]    |
| Weight  | 0.354 lbs [160.57 g] |

##### Cable

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | LMR-400-DB           |
| 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  |

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 UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM PE3C9301-100CM](#)



## N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM

### RF Cable Assemblies Technical Data Sheet

**PE3C9301-100CM**

|                              |                        |
|------------------------------|------------------------|
| Jacket Material              | PE, Black              |
| Jacket Diameter              | 0.405 in [10.29 mm]    |
| 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                | UHF Male                |
| Impedance                          | 50 Ohms               | 50 Ohms                 |
| Mating Cycles                      |                       | 500                     |
| Contact Material and Plating       | Brass, Gold           | Phosphor Bronze, silver |
| Contact Plating Specification      | 50 $\mu$ in. minimum  | 200 $\mu$ in            |
| Dielectric Type                    | PTFE                  | PTFE                    |
| Body Material and Plating          | Brass, Tri-Metal      | Brass, Nickel           |
| Body Plating Specification         | 150 $\mu$ in. minimum | 100 $\mu$ in            |
| Coupling Nut Material and Plating  | Brass, Tri-Metal      | Brass, Nickel           |
| Coupling Nut Plating Specification | 150 $\mu$ in. minimum | 100 $\mu$ in            |
| Hex Size                           | 13/16 inch            |                         |

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

**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 UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM PE3C9301-100CM](#)



N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM

**RF Cable Assemblies Technical Data Sheet**

**PE3C9301-100CM**

**How to Order**

Part Number Configuration:

**PE3C9301**

- **xx**

**uu**

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

Example: PE3C9301-12 = 12 inches long cable  
PE3C9301-100cm = 100 cm long cable

N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM 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 UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM PE3C9301-100CM](https://www.pasternack.com/n-male-to-uhf-male-cable-using-lmr-400-db-pe3c9301-100cm)

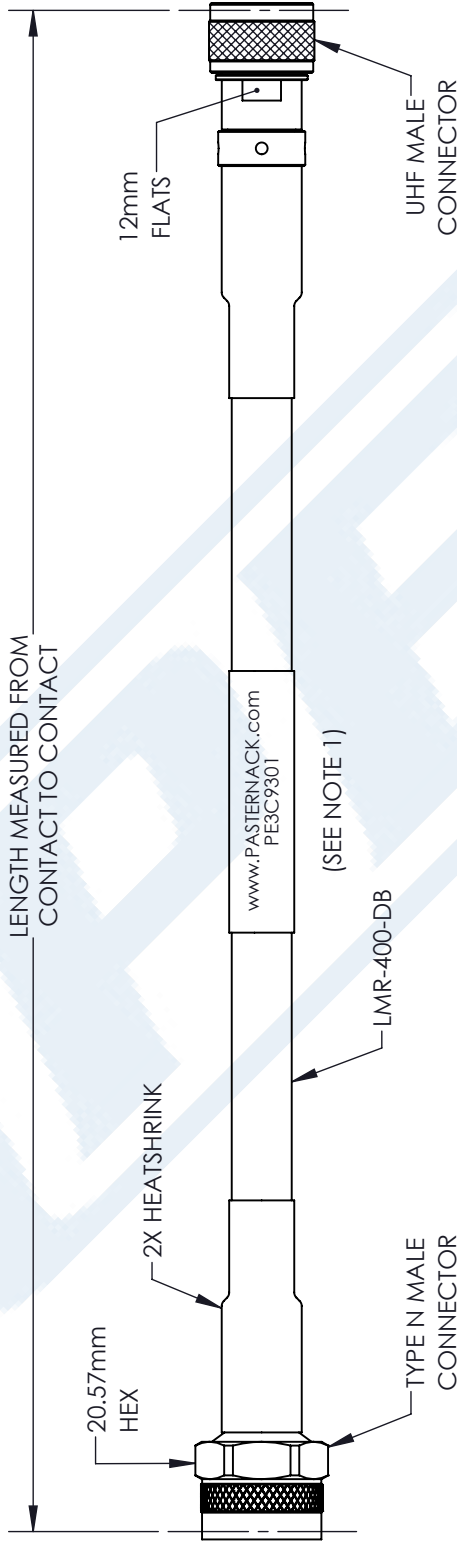
URL: [https://www.pasternack.com/n-male-to-uhf-male-cable-using-lmr-400-db-pe3c9301-100CM-p.aspx](https://www.pasternack.com/n-male-to-uhf-male-cable-using-lmr-400-db-pe3c9301-100cm-p.aspx)

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.

# PE3C9301-100CM CAD Drawing

N Male to UHF Male Low Loss Cable Using LMR-400-DB Coax in 100CM

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 08/10/2022 | AGANWANI |



|   |  |   |
|---|--|---|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [ .08]    FRACTIONS ± 1/32<br/>                 .XX = ±.02 [ .51]    ANGLES ± 1°<br/>                 .XXX = ±.005 [ .13]</p> <p>CABLE LENGTH (L), TOLERANCES:<br/>                 L ≤ 12 [305] = +1 [25] / -0<br/>                 12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0<br/>                 60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0<br/>                 120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0<br/>                 300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | <p><b>PE PASTERNAK</b><br/>an INFINITI brand</p> <p>Pasternack Enterprises, Inc.<br/>                 P. O. Box 16759, Irvine, CA 92623.<br/>                 Phone: 1.949.261.1920   1.866.727.8376<br/>                 Fax: 1.949.261.7451<br/>                 Website: www.pasternack.com<br/>                 E-mail: sales@pasternack.com</p> | <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>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY BPUCHASKI</p> <p>ITEM NO. PE3C9301</p>  | <p>REV A</p>  |

**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM END OF CONNECTOR

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.