

N Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax



PE3W15443

Configuration

- Connector 1: N Female Bulkhead
- Connector 2: SMA Male Right Angle
- Cable Type: LMR-100A-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15443 type N female bulkhead to SMA male right angle cable using LMR-100A-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 SMA cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3W15443 type N female to SMA male cable assembly operates to 6 GHz. The right angle SMA interface on the LMR-100A-UF cable allows for easier connections in tight spaces. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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 | | 6 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 66 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.54 [5.05] | | ns/ft [ns/m] |
| Capacitance | | 30.8 [101.05] | | pF/ft [pF/m] |
| Inductance | | 0.077 [0.25] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 81 [265.75] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 9.5 [31.17] | | Ohms/1000ft [Ohms/Km] |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark | | | 2,000 | Vrms |

Specifications by Frequency

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|-----------------|--------------------------|-----------------------|-----------|-------|------|-------|-------|-------|--------------|
| | | | Frequency | | | | | MHz | |
| PE3W15443 | Custom Lengths Available | Insertion Loss (Typ.) | 0.115 | 0.165 | 0.24 | 0.398 | 0.641 | dB/ft | |
| | | | 0.38 | 0.55 | 0.79 | 1.31 | 2.11 | dB/m | |
| PE3W15443-24 | 24 In | Insertion Loss (Typ.) | 0.53 | 0.63 | 0.78 | 1.1 | 1.59 | dB | 0.116 |
| PE3W15443-36 | 36 In | Insertion Loss (Typ.) | 0.65 | 0.8 | 1.02 | 1.5 | 2.23 | dB | 0.124 |
| PE3W15443-48 | 48 In | Insertion Loss (Typ.) | 0.76 | 0.96 | 1.26 | 1.9 | 2.87 | dB | 0.132 |
| PE3W15443-100CM | 100 CM | Insertion Loss (Typ.) | 0.68 | 0.85 | 1.09 | 1.61 | 2.41 | dB | 0.126 |
| PE3W15443-200CM | 200 CM | Insertion Loss (Typ.) | 1.06 | 1.39 | 1.88 | 2.92 | 4.51 | dB | 0.152 |

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: | 0.2 dB |
| Base Weight: | 0.107 pounds |
| Additional Weight per Inch: | 0.00067 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.107 lbs [48.53 g] |

Cable

| | |
|--------------------------------------|------------------------|
| Cable Type | LMR-100A-UF |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper |
| Dielectric Type | PE |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper |
| Jacket Material | TPE, Black |
| Jacket Diameter | 0.11 in [2.79 mm] |
| One Time Minimum Bend Radius | 0.25 in [6.35 mm] |
| Repeated Minimum Bend Radius | 1 in [25.4 mm] |
| Bending Moment | 0.1 lbs-ft [0.14 N-m] |
| Flat Plate Crush | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength | 15 lbs [6.8 Kg] |

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------------|----------------------|
| Type | N Female Bulkhead | SMA Male Right Angle |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Right Angle |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 30 µin minimum | 50 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100 µin minimum |
| Coupling Nut Material and Plating | | Brass, Nickel |
| Coupling Nut Plating Specification | | 100 µin minimum |
| Hex Size | | 5/16 inch |
| Torque | | 3 in-lbs 0.34 Nm |

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W15443

Typical Performance Data

How to Order

Part Number Configuration:

PE3W15443

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W15443-12 = 12 inches long cable
PE3W15443-100cm = 100 cm long cable

N Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF 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.

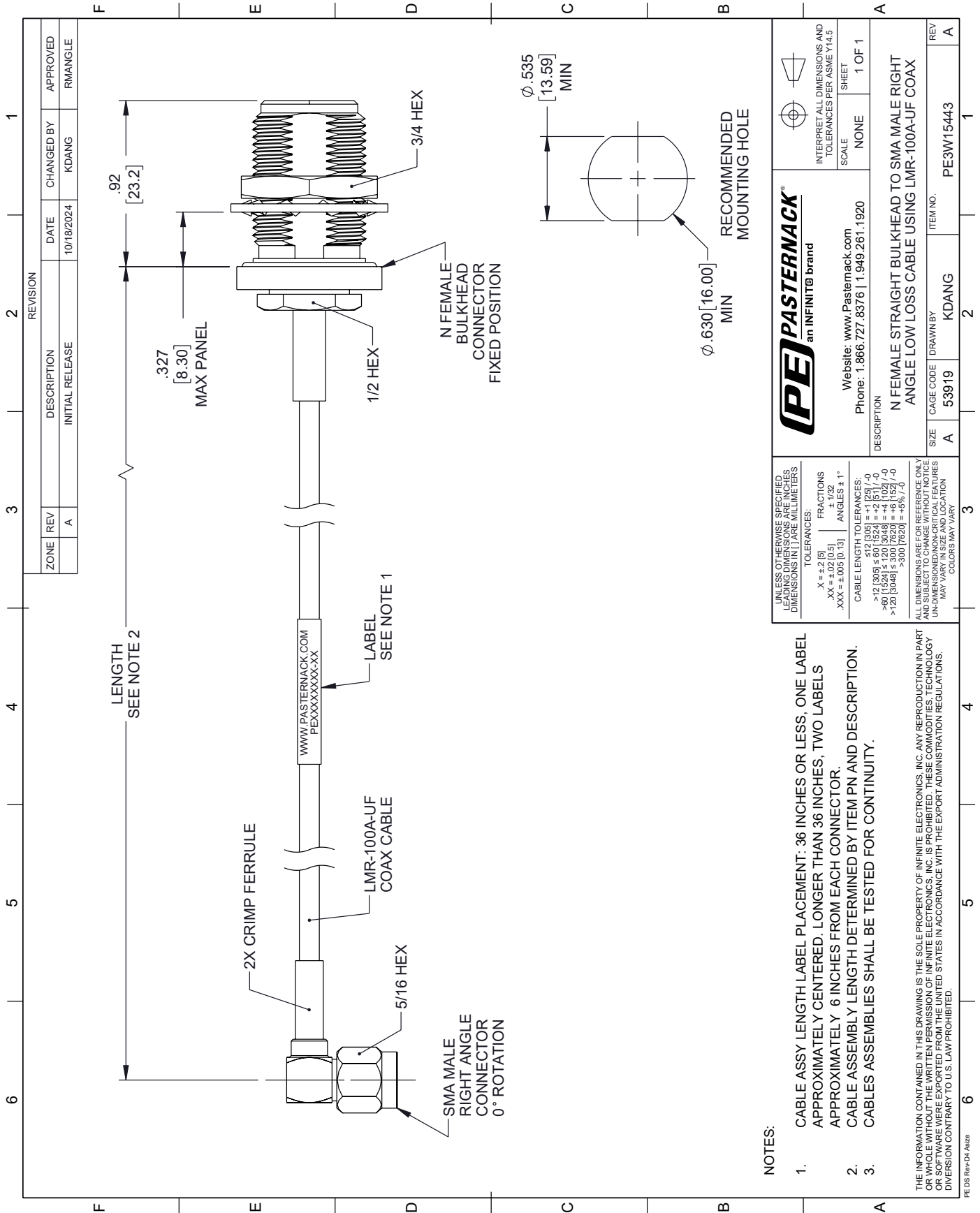
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Bulkhead to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax PE3W15443](#)

URL: <https://www.pasternack.com/n-female-bulkhead-to-sma-male-low-loss-cable-using-lmr-100a-uf-pe3w15443-p.aspx>

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PE3W15443 CAD Drawing

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NOTES:

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

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| | |
|--|------------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PARENS ARE MILLIMETERS | |
| TOLERANCES: | |
| X = ±.015 | FRACTIONS ± 1/32 |
| .XX = ±.02 [0.5] | ANGLES ± 1° |
| .XXX = ±.005 [0.13] | |
| CABLE LENGTH TOLERANCES: | |
| >12 [305] ≤ 60 [1524] = +1 [25] / -0 | |
| >60 [1524] ≤ 120 [3048] = +4 [102] / -0 | |
| >120 [3048] ≤ 300 [7620] = +5 [127] / -0 | |
| >300 [7620] = +5 [127] / -0 | |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. | |

| | |
|--|-----------|
| PE PASTERNAK an INFINITIB brand | |
| INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | |
| SCALE | NONE |
| SHEET | 1 OF 1 |
| Website: www.Pasternack.com | |
| Phone: 1.866.727.8376 1.949.261.1920 | |
| DESCRIPTION | |
| N FEMALE STRAIGHT BULKHEAD TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-100A-UF COAX | |
| SIZE | A |
| CAGE CODE | 53919 |
| DRAWN BY | KDANG |
| ITEM NO. | PE3W15443 |
| REV | A |