

N Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-FR Coax with HeatShrink



PE3W15719/HS

Configuration

- Connector 1: N Male Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: LMR-240-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- FRPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15719/HS type N male right angle to SMA male right angle cable using LMR-240-FR 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-240-FR coax. The PE3W15719/HS type N male to SMA male cable assembly operates to 6 GHz. The right angle type N and right angle SMA interfaces on the LMR-240-FR cable allow for easier connections in tight spaces. 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 | | 83 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.21 [3.97] | | ns/ft [ns/m] |
| Capacitance | | 24.2 [79.4] | | pF/ft [pF/m] |
| Inductance | | 0.06 [0.2] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 3.2 [10.5] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 3.89 [12.76] | | Ohms/1000ft [Ohms/Km] |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark | | | 5,000 | Vrms |

Specifications by Frequency

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|-----------------|--------------------------|-----------------------|-----------|-------|-------|-------|-------|-------|--------------|
| | | | Frequency | | | | | MHz | |
| PE3W15719/HS | Custom Lengths Available | Insertion Loss (Typ.) | 0.039 | 0.056 | 0.076 | 0.129 | 0.204 | dB/ft | |
| | | | 0.13 | 0.19 | 0.25 | 0.43 | 0.67 | dB/m | |
| PE3W15719/HS-12 | 12 inch | Insertion Loss (Typ.) | 0.49 | 0.51 | 0.53 | 0.58 | 0.66 | dB | 0.158 |
| PE3W15719/HS-24 | 24 inch | Insertion Loss (Typ.) | 0.53 | 0.57 | 0.61 | 0.71 | 0.86 | dB | 0.197 |
| PE3W15719/HS-36 | 36 inch | Insertion Loss (Typ.) | 0.57 | 0.62 | 0.68 | 0.84 | 1.07 | dB | 0.236 |
| PE3W15719/HS-48 | 48 inch | Insertion Loss (Typ.) | 0.61 | 0.68 | 0.76 | 0.97 | 1.27 | dB | 0.275 |
| PE3W15719/HS-60 | 60 inch | Insertion Loss (Typ.) | 0.65 | 0.73 | 0.83 | 1.1 | 1.47 | dB | 0.314 |

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: | 0.2 dB |
| Loss due to Connector 2: | 0.25 dB |
| Base Weight: | 0.158 pounds |
| Additional Weight per Inch: | 0.00325 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.119 lbs [53.98 g] |

Cable

| | |
|--------------------------------------|------------------------|
| Cable Type | LMR-240-FR |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper |
| Dielectric Type | Foam PE |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper |
| Jacket Material | FRPE, Black |
| Jacket Diameter | 0.24 in [6.1 mm] |
| One Time Minimum Bend Radius | 0.75 in [19.05 mm] |
| Repeated Minimum Bend Radius | 2.5 in [63.5 mm] |
| Bending Moment | 0.25 lbs-ft [0.34 N-m] |
| Flat Plate Crush | 20 lbs/in [0.36 Kg/mm] |
| Tensile Strength | 80 lbs [36.29 Kg] |

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|--------------------|-----------------------------|
| Type | N Male Right Angle | SMA Male Right Angle |
| Specification | | MIL-STD-348 |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Right Angle | Right Angle |
| Mating Cycles | | 500 |
| Contact Material and Plating | Brass, Gold | Brass/Phosphor Bronze, Gold |
| Contact Plating Specification | | 50 µinch |
| Dielectric Type | PTFE | Teflon |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | | 80 µinch |
| Coupling Nut Material and Plating | | Brass, Tri-Metal |
| Coupling Nut Plating Specification | | 80 µinch |
| Hex Size | | 5/16 Inch |
| Torque | | 7 in-lbs 0.79 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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PE3W15719/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W15719/HS - xx uu

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

Example: PE3W15719/HS-12 = 12 inches long cable
 PE3W15719/HS-100cm = 100 cm long cable

N Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-FR Coax with HeatShrink 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.

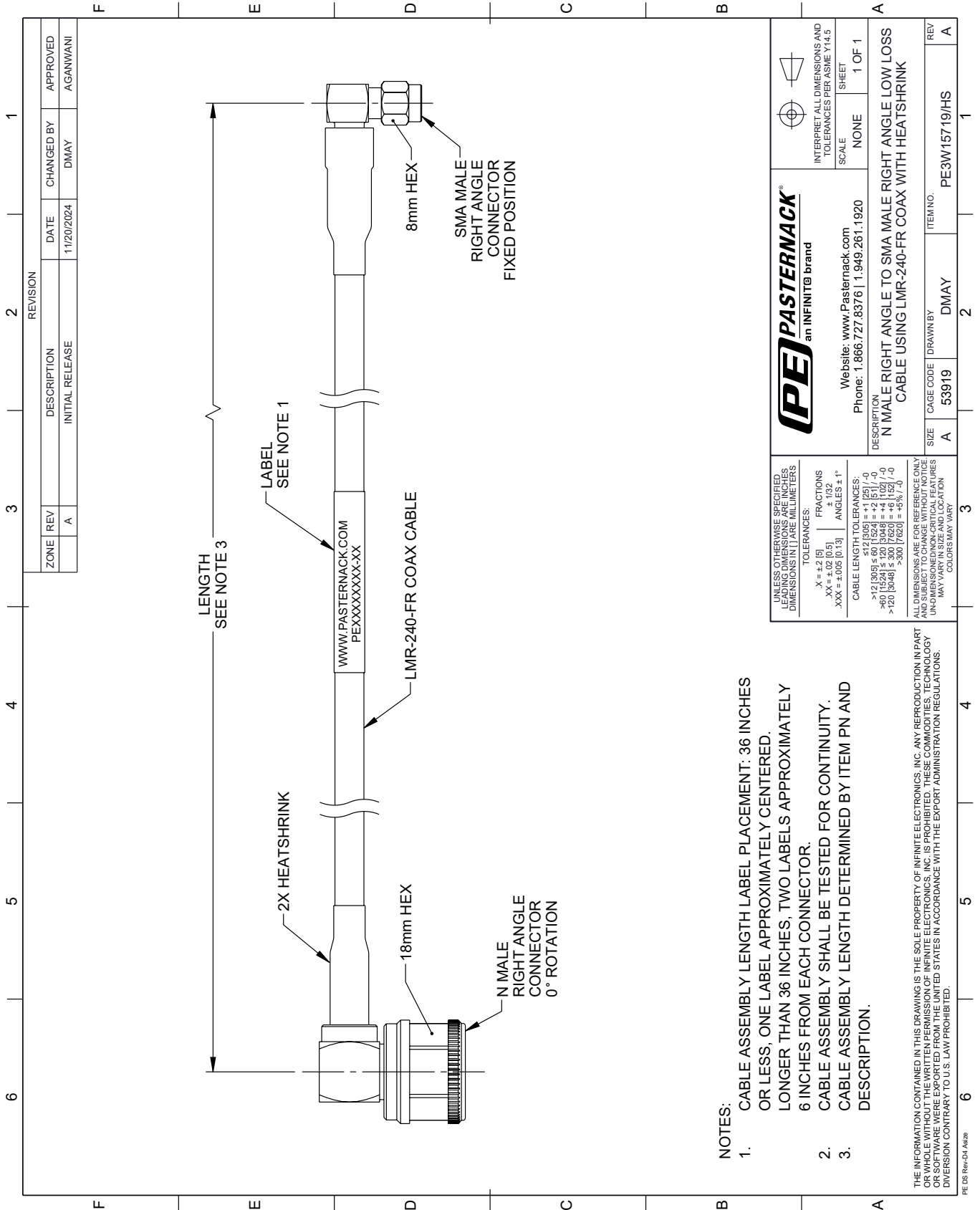
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle to SMA Male Right Angle Low Loss Cable Using LMR-240-FR Coax with HeatShrink PE3W15719/HS](#)

URL: <https://www.pasternack.com/n-male-right-angle-to-sma-male-low-loss-cable-using-lmr-240-fr-with-heatshrink-pe3w15719-hs-p.aspx>

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PE3W15719/HS CAD Drawing

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NOTES:

1. 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.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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| <p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]</p> <p>FRACTIONS: ± 1/32 ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES: <12 [305] ≤ 60 [1524] = ±.1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p> | | <p>DESCRIPTION: N MALE RIGHT ANGLE TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-240-FR COAX WITH HEATSHRINK</p> | <p>REV: A</p> |
| <p>ZONE: A</p> | <p>REV: A</p> | <p>DATE: 11/20/2024</p> | <p>APPROVED: AGANWANI</p> |
| <p>DESCRIPTION: INITIAL RELEASE</p> | <p>CHANGED BY: DMAY</p> | <p>DATE: 11/20/2024</p> | <p>APPROVED: AGANWANI</p> |