

SMA Male to N Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components



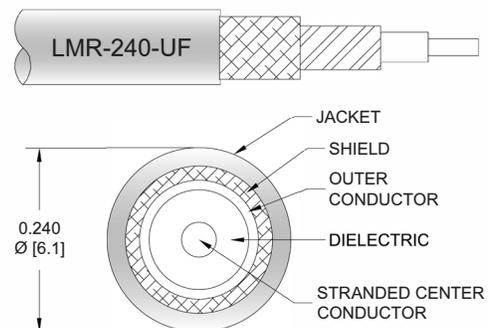
PE3C1877

Configuration

- Connector 1: SMA Male
- Connector 2: N Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1877 SMA male to type N male cable using LMR-240-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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C1877 SMA male to type N male cable assembly operates to 6 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.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.25:1 | |
| Velocity of Propagation | | 84 | | % |
| 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 | | 4.28 [14.04] | | 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 | |
| PE3C1877 | Custom Lengths Available | Insertion Loss (Typ.) | 0.046 | 0.066 | 0.096 | 0.155 | 0.212 | dB/ft | |
| | | | 0.16 | 0.22 | 0.32 | 0.51 | 0.7 | dB/m | |
| PE3C1877-12 | 12 Inch | Insertion Loss (Typ.) | 0.25 | 0.27 | 0.3 | 0.36 | 0.42 | dB | 0.14 |
| PE3C1877-24 | 24 Inch | Insertion Loss (Typ.) | 0.3 | 0.34 | 0.4 | 0.51 | 0.63 | dB | 0.173 |
| PE3C1877-36 | 36 Inch | Insertion Loss (Typ.) | 0.34 | 0.4 | 0.49 | 0.67 | 0.84 | dB | 0.205 |
| PE3C1877-60 | 60 Inch | Insertion Loss (Typ.) | 0.43 | 0.53 | 0.68 | 0.98 | 1.26 | dB | 0.269 |
| PE3C1877-300 | 300 Inch | Insertion Loss (Typ.) | 1.35 | 1.85 | 2.6 | 4.08 | 5.5 | dB | 0.909 |

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: | 0.1 dB |
| Base Weight: | 0.14 pounds |
| Additional Weight per Inch: | 0.00267 pounds |

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.108 lbs [48.99 g] |

Cable

| | |
|--------------------------------------|------------------------|
| Cable Type | LMR-240-UF |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper |
| Dielectric Type | PE (F) |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper Braid |
| Jacket Material | TPE, 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 | 0.13 lbs-ft [0.18 N-m] |
| Flat Plate Crush | 13 lbs/in [0.23 Kg/mm] |
| Tensile Strength | 80 lbs [36.29 Kg] |

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Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|----------------------------------|------------------|
| Type | SMA Male | N Male |
| Specification | MIL-STD-348 | MIL-STD-348 |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Beryllium Copper, Gold | Brass, Gold |
| Contact Plating Specification | ASTM B488 | |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Passivated Stainless Steel, Gold | |
| Body Material and Plating | Passivated Stainless Steel, Gold | Brass, Tri-Metal |
| Body Plating Specification | SAE-AMS-2700 | |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Brass, Tri-Metal |
| Coupling Nut Plating Specification | SAE-AMS-2700 | |

Environmental Specifications

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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PE3C1877

Typical Performance Data

How to Order

Part Number Configuration:

PE3C1877

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C1877-12 = 12 inches long cable
PE3C1877-100cm = 100 cm long cable

SMA Male to N Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components 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.

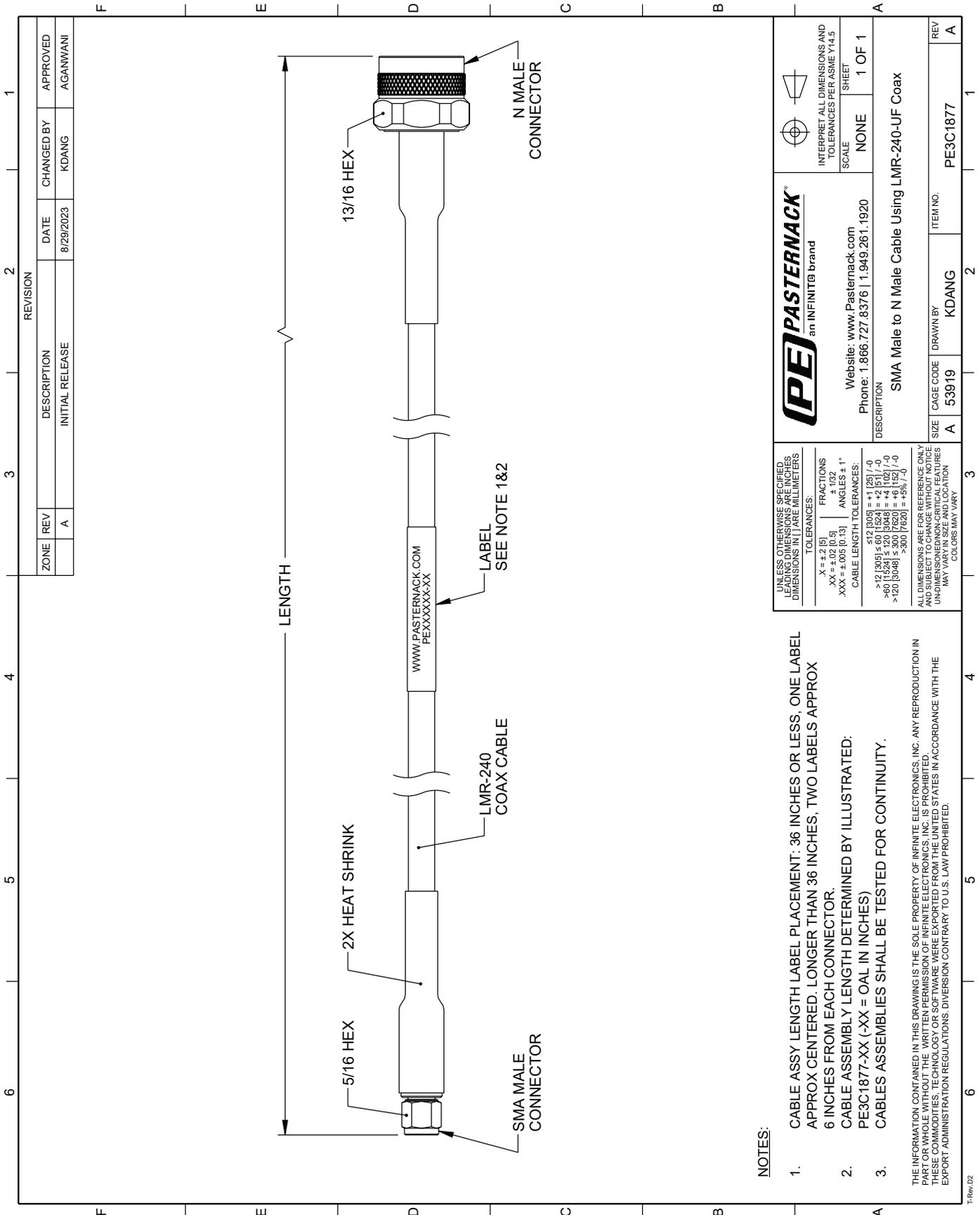
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to N Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components PE3C1877](https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-240-uf-pe3c1877-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-lmr-240-uf-pe3c1877-p.aspx>

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PE3C1877 CAD Drawing

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NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ILLUSTRATED: PE3C1877-XX (-XX = OAL IN INCHES)
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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TRev.02

| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
|------|-----|-----------------|-----------|------------|----------|
| | A | INITIAL RELEASE | 8/29/2023 | KDANG | AGANWANI |

| | |
|---|--|
| | 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: SMA Male to N Male Cable Using LMR-240-UF Coax | |
| SIZE: A CAGE CODE: 53919 DRAWN BY: KDANG | ITEM NO.: PE3C1877 REV: A |

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:
 ≤12 [305] ±.1 [2.5] / -0
 >12 [305] ≤ 60 [1524] = ±.2 [5.1] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0
 >300 [7620] = ±.9% [7.6]

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED DIMENSIONS MAY VARY IN SIZE AND LOCATION COLORS MAY VARY