



BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax With Times Microwave components , LF Solder

## RF Cable Assemblies Technical Data Sheet

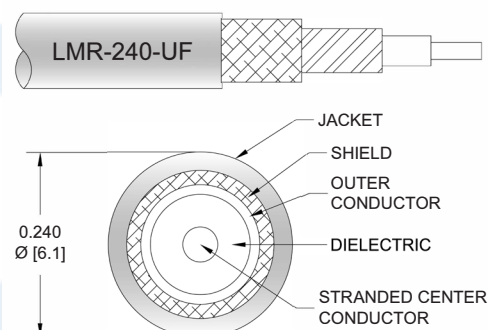
**PE3C2156LF**

### Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: LMR-240-UF

### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



### Applications

- General Purpose
- Laboratory Use

### Description

Pasternack's PE3C2156LF BNC male to BNC 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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C2156LF BNC male to BNC male cable assembly operates to 4 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: [BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax With Times Microwave components , LF Solder PE3C2156LF](#)



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### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 4       | GHz             |
| VSWR                          |         |              | 1.4:1   |                 |
| 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] |         | Ω/1000ft [Ω/Km] |
| DC Resistance Outer Conductor |         | 3.89 [12.76] |         | Ω/1000ft [Ω/Km] |
| Jacket Spark                  |         |              | 5,000   | Vrms            |

### Specifications by Frequency

| Description           | F1    | F2    | F3    | F4    | F5    | Units |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Frequency             | 0.1   | 0.25  | 0.5   | 1     | 4     | GHz   |
| Insertion Loss (Typ.) | 0.029 | 0.046 | 0.066 | 0.096 | 0.195 | dB/ft |
|                       | 0.1   | 0.15  | 0.22  | 0.31  | 0.64  | dB/m  |

#### Electrical Specification Notes:

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

### Mechanical Specifications

#### Cable Assembly

Weight 0.094 lbs [42.64 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]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax With Times Microwave components , LF Solder PE3C2156LF](#)



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|                              |                        |
|------------------------------|------------------------|
| 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]      |

### Connectors

| Description                       | Connector 1   | Connector 2   |
|-----------------------------------|---------------|---------------|
| Type                              | BNC Male      | BNC Male      |
| Specification                     | MIL-STD-348   | MIL-STD-348   |
| Impedance                         | 50 Ohms       | 50 Ohms       |
| Contact Material and Plating      | Brass, Gold   | Brass, Gold   |
| Dielectric Type                   | PTFE          | PTFE          |
| Body Material and Plating         | Brass, Nickel | Brass, Nickel |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |

### Environmental Specifications

#### Temperature

|                 |                  |
|-----------------|------------------|
| Operating Range | -40 to +85 deg C |
|-----------------|------------------|

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

### Plotted and Other Data

Notes:

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**PE3C2156LF**

### How to Order

Part Number Configuration:

**PE3C2156LF**

- **xx**

**uu**

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

Example: PE3C2156LF-12 = 12 inches long cable  
PE3C2156LF-100cm = 100 cm long cable

BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax With Times Microwave components , LF Solder 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.

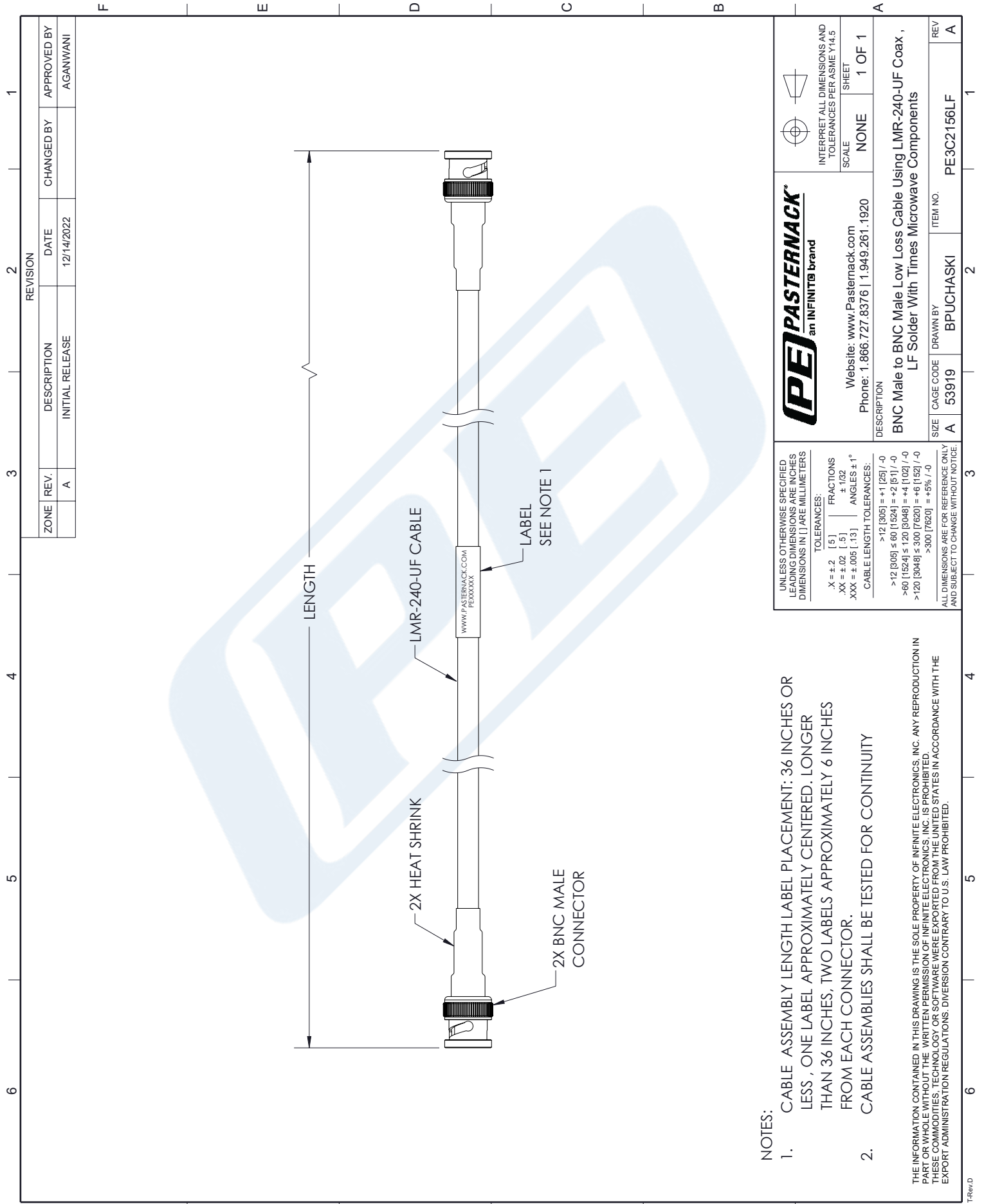
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URL: <https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-240-uf-lf-solder-pe3c2156lf-p.aspx>

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.

# PE3C2156LF 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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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|  <b>PASTERNAK</b><br>an INFINITI <sup>®</sup> brand |           | <br>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1 |            |
| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920                          |           | DESCRIPTION<br>BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax , LF Solder With Times Microwave Components                                                          |            |
| SIZE                                                                                                                                   | CAGE CODE | DRAWN BY                                                                                                                                                                      | ITEM NO.   |
| A                                                                                                                                      | 53919     | BPUCHASKI                                                                                                                                                                     | PE3C2156LF |
| REV                                                                                                                                    |           | A                                                                                                                                                                             |            |

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

TOLERANCES:

|             |       |             |
|-------------|-------|-------------|
| X = ±.2     | [.5]  | FRACTIONS   |
| .XX = ±.02  | [.13] | ± 1/32      |
| XXX = ±.005 | [.13] | ANGLES ± 1° |

CABLE LENGTH TOLERANCES:

|                                          |
|------------------------------------------|
| >12 [305] = +1 [25] / -0                 |
| >12 [305] ≤ 60 [1524] = +2 [51] / -0     |
| >60 [1524] ≤ 120 [3048] = +4 [102] / -0  |
| >120 [3048] ≤ 300 [7620] = +6 [152] / -0 |
| >300 [7620] = +5% / -0                   |

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.