

4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 Coax With Times Microwave Components



RF Cable Assemblies Technical Data Sheet

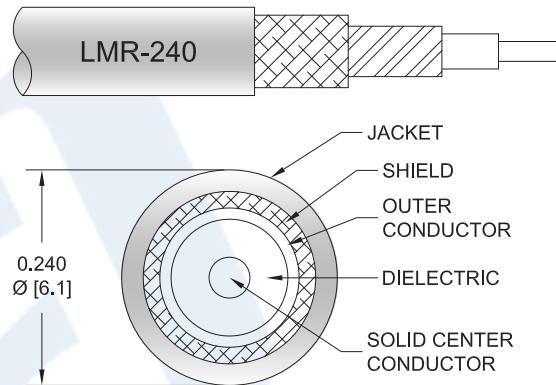
PE3C6906

Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Male
- Cable Type: LMR-240

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C6906 4.3-10 male to 4.3-10 male cable using LMR-240 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 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3C6906 4.3-10 male to 4.3-10 male cable assembly operates to 5.8 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: [4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 Coax With Times Microwave Components PE3C6906](#)

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range | DC | | 5.8 | 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 | | 3.2 [10.5] | | 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 | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.04 | 0.055 | 0.079 | 0.129 | 0.204 | dB/ft |
| | 0.13 | 0.18 | 0.26 | 0.42 | 0.67 | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 \times \text{SQRT}(F \text{GHz})$ per connector.

Mechanical Specifications

Cable Assembly

Weight 0.234 lbs [106.14 g]

Cable

Cable Type LMR-240
Impedance 50 Ohms
Inner Conductor Type Solid
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 PE, 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: [4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 Coax With Times Microwave Components PE3C6906](#)

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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 | 0.25 lbs-ft [0.34 N-m] |
| Flat Plate Crush | 20 lbs/in [0.36 Kg/mm] |
| Tensile Strength | 80 lbs [36.29 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|------------------------|------------------------|
| Type | 4.3-10 Male | 4.3-10 Male |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Brass, Silver | Brass, Silver |
| Contact Plating Specification | 200 μ in thickness | 200 μ in thickness |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 80 μ in thickness | 80 μ in thickness |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 μ in thickness | 80 μ in thickness |

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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PE3C6906

How to Order

Part Number Configuration:

PE3C6906

- **xx**

uu

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

Example: PE3C6906-12 = 12 inches long cable
PE3C6906-100cm = 100 cm long cable

4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 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: [4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 Coax With Times Microwave Components PE3C6906](#)

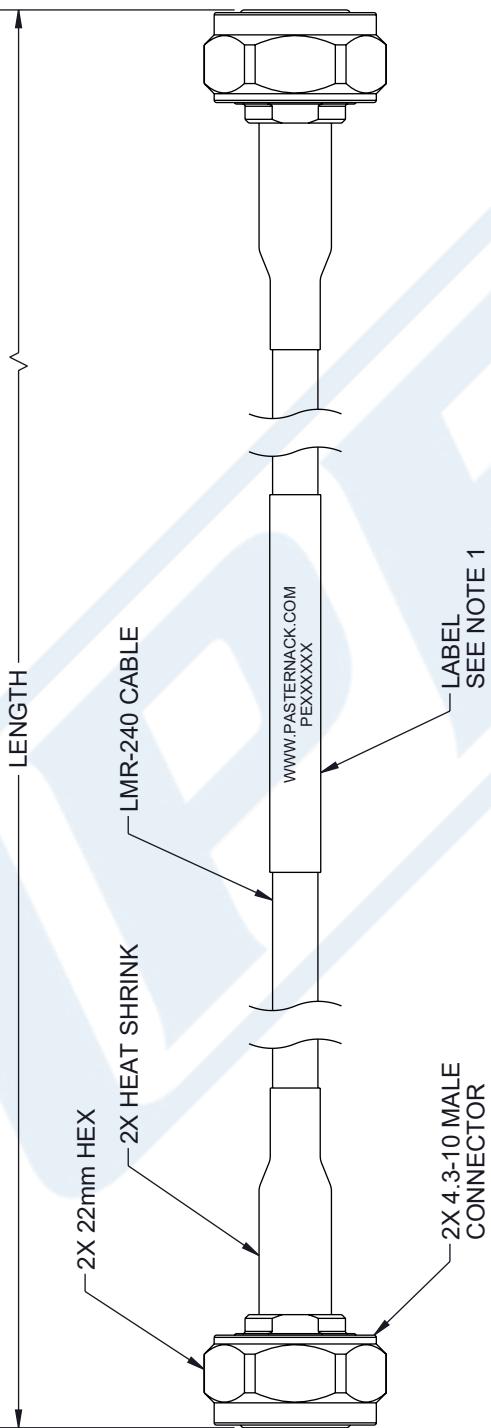
URL: <https://www.pasternack.com/4.3-10-male-to-4.3-10-male-low-loss-cable-using-lmr-240-pe3c6906-p.aspx>

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.

PE3C6906 CAD Drawing

4.3-10 Male to 4.3-10 Male Low Loss Cable Using LMR-240 Coax With Times Microwave Components

| ZONE | REV. | DESCRIPTION | REV. NUMBER | DATE | CHANGED BY | APPROVED BY |
|------|------|-----------------|-------------|------------|------------|-------------|
| | A | INITIAL RELEASE | | 01/03/2023 | HBAKKE | AGANVANI |



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.
CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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|--|-----------|---|----------|---|-----|
|  PASTERNACK® an INFINIT® brand | |  | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | |
| | | | | SCALE | REV |
| | | | | NONE | A |
| | | | | 1 OF 1 | |
| | | | | SHEET | |
| OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: IN MILLIMETERS | | FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$ LENGTH TOLERANCES: $\pm 1.2 [30.5]$ = $\pm 1 [25]$ / -0 $\pm 1.5 [38]$ = $\pm 1.5 [63.5]$ = $\pm 1 [51]$ / -0 $\pm 1.5 [38]$ = $\pm 1.5 [42.0]$ = $\pm 1.5 [30]$ = $\pm 1.5 [30.48]$ = $\pm 1.5 [30]$ / -0 $\pm 3.0 [76.2]$ = $\pm 3.0 [192.0]$ = $\pm 3.0 [76.20]$ = $\pm 3.0 [192.0]$ / -0 | | WEBSITE: www.Pasternack.com PHONE: 1.866.727.8376 1.949.261.1920 | |
| | | DESCRIPTION 4-3-10 Male to 4-3-10 Male Low Loss Cable Using LMR-240 Coax | | | |
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | PE3C6906 | REV |
| A | 53919 | HBAKKE | | | A |