

RP SMA Male to RA QMA Male Cable LMR-240 Coax

The RP SMA male to RA QMA male cable using LMR-240 coax, part number FMC00423, from Fairview Microwave is in-stock and ships same day. This Fairview reverse polarity SMA to QMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00423 reverse polarity SMA male to QMA male cable assembly operates to 4 GHz. The right angle QMA interface on the LMR-240 cable allows for easier connections in tight spaces. The double shielding of this Fairview 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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

| Description | Min | Typ | Max | 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 | | 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 |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 4 | GHz |
| Insertion Loss (Max.) | 0.02 | 0.03 | 0.03 | 0.05 | 0.14 | dB/ft |
| | 0.07 | 0.1 | 0.1 | 0.16 | 0.46 | 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 SMA Male connector and 0.2 dB for the QMA Male connector.

Mechanical Specifications

Cable Assembly

Cable

Cable Type LMR-240
 Impedance 50 Ohms



Configuration:

- SMA Male Reverse Polarity
- QMA Male Right Angle
- LMR-240

Features:

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

Applications:

- General Purpose
- Laboratory Use

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| | |
|--------------------------------------|------------------------|
| 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] |
| 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 | SMA Male | QMA Male |
| Polarity | Reverse Polarity | |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type | PTFE | PTFE |
| Outer Cond Material & Plating | | Brass, Nickel |
| Body Material & Plating | Brass, Gold | Brass, Nickel |
| Coupling Nut Material & Plating | Brass, Gold | |
| Hex Size | 5/16 inch | |
| Torque | 5 in-lbs 0.57 Nm | |

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

Plotted and Other Data

- Notes:
- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMC00423 - xx uu

cm = Centimeters
<blank> = Inches
Length

Example: FMC00423-12 = 12 inches long cable
FMC00423-100cm = 100 cm long cable

RP SMA Male to RA QMA Male Cable LMR-240 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

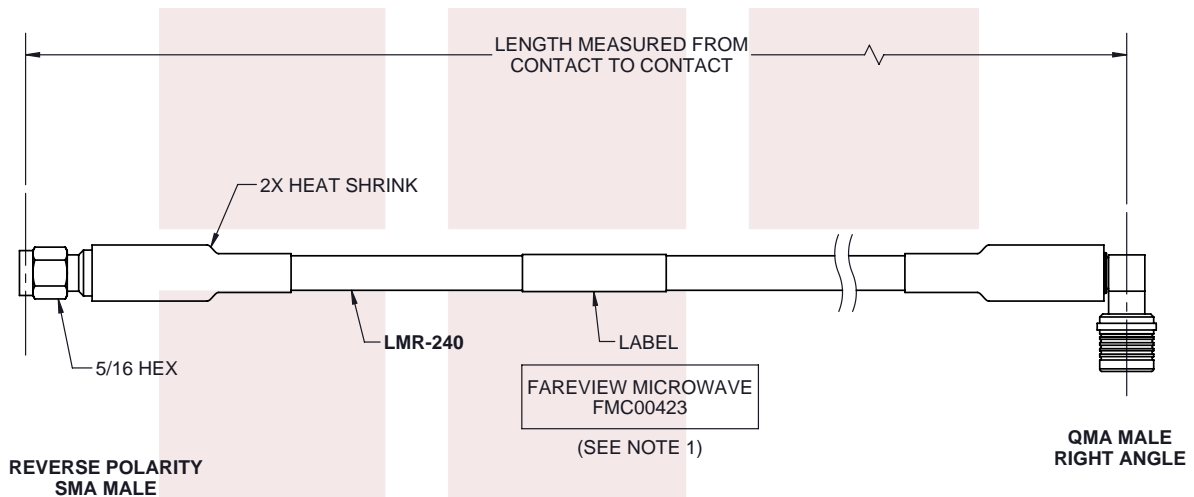
Click the following link to obtain additional part information: [RP SMA Male to RA QMA Male Cable LMR-240 Coax FMC00423](#)

URL: <https://www.fairviewmicrowave.com/sma-male-ra-qma-male-cable-lmr240-coax-fmc00423-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 09/14/2020 | SELLIS |



NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE END OF THE CONNECTOR.

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|---|---|---------------------|---|---|
| <p>Fairview Microwave an INFINIT[®] brand</p> | UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | | THIRD-ANGLE PROJECTION | |
| | TOLERANCES: | | CABLE LENGTH (L) TOLERANCES: | |
| TITLE RP SMA Male to RA QMA Male Cable LMR-240 Coax | .X = ±.2 [.508] | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0 | THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. |
| | .XX = ±.02 [.51] | ANGLES ± 1° | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | SHEET 1 OF 1 SCALE N/A |
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY BPUCHASKI | ITEM NO. FMC00423 | REV A |

T-Rev.D