

**QMA Male to QMA Male Right Angle Low PIM Cable
60 Inch Length Using TFT-5G-402 Coax Using
Times Microwave Components**

FMCA2356-60



Configuration

- Connector 1: QMA Male
- Connector 2: QMA Male Right Angle
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Low PIM: -150 dBc Max
- Shielding Effectivity > 80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket
- 100 Mating Cycles

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

Description

The QMA male to RA QMA male 60 inch cable using TFT-5G-402 coax, part number FMCA2356-60, from Fairview Microwave is in-stock and ships same day. This Fairview QMA to QMA cable assembly has a male to male gender configuration with 50 ohm flexible TFT-5G-402 coax. Fairview Microwave’s flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -150 dBc. The FMCA2356-60 QMA male to QMA male cable assembly operates to 3 GHz. The right angle QMA interface on the TFT-5G-402 cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 80 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	80			dB
Passive Intermodulation			-150	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		26.7 [87.6]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.29	0.4	0.58	0.8	1.48	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1*SQRT(FGHz) dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.413 in [10.49 mm]

Cable

Cable Type TFT-5G-402
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper
 Dielectric Type PTFE
 Number of Shields 2
 Jacket Material FEP, Blue
 Jacket Diameter 0.16 in [4.06 mm]
 One Time Minimum Bend Radius 0.75 in [19.05 mm]

Connectors

Description	Connector 1	Connector 2
Type	QMA Male	QMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	100	100
Contact Material and Plating	Brass, Silver	Beryllium Copper, Silver
Contact Plating Specification	5 µm	200 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Tri-Metal
Body Plating Specification	5 µm	80 µin
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin

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Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

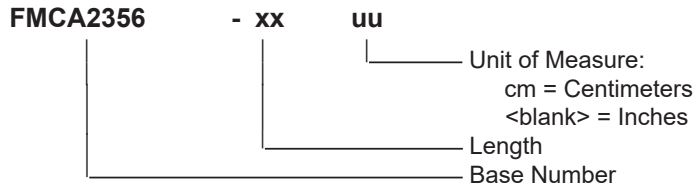
Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2356-12 = 12 inches long cable
FMCA2356-100cm = 100 cm long cable

QMA Male to QMA Male Right Angle Low PIM Cable 60 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

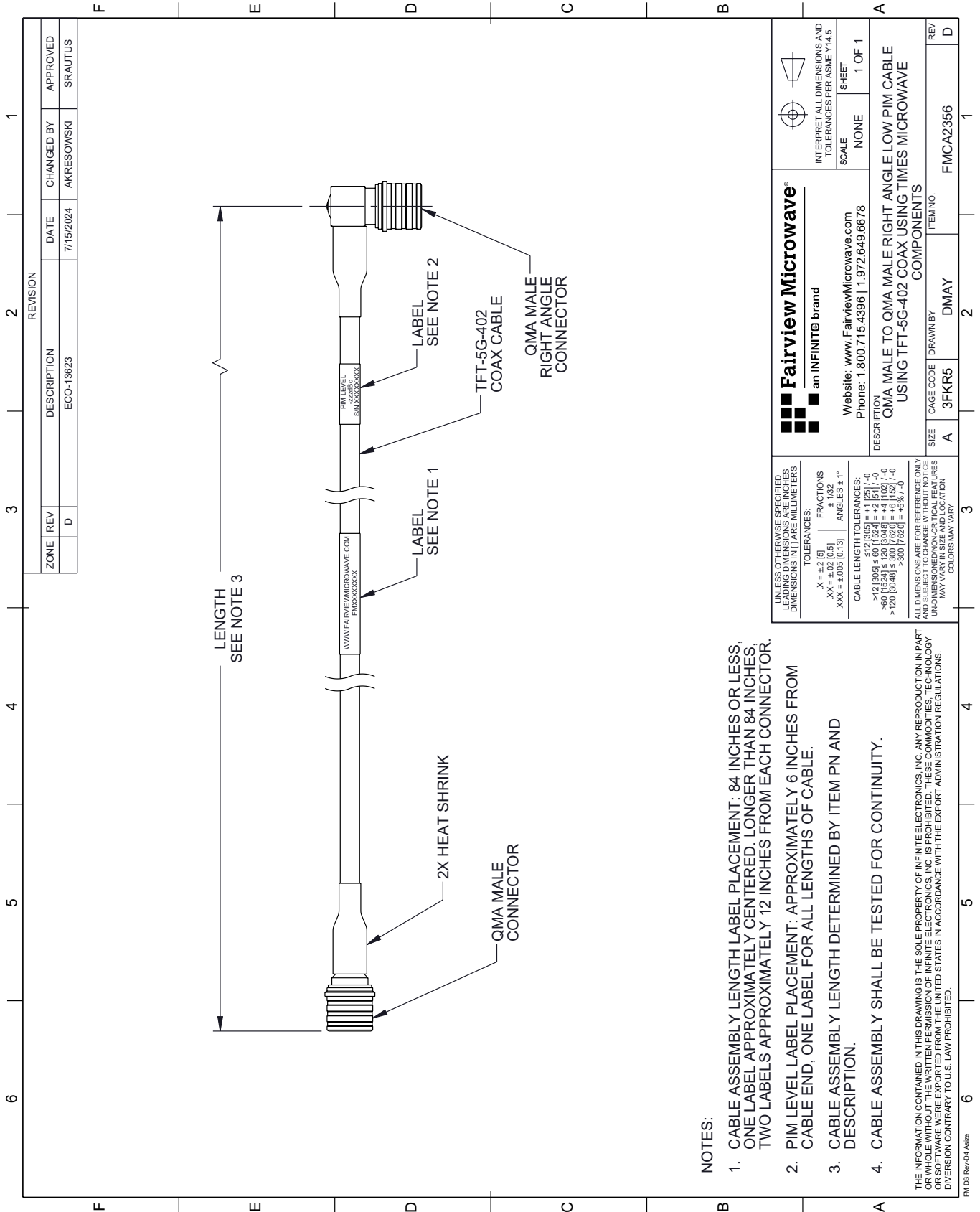
For additional information on this product, please click the following link: [QMA Male to QMA Male Right Angle Low PIM Cable 60 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components FMCA2356-60](#)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-qma-male-ra-qma-male-cable-tft-5g-402-coax-fmca2356-60.html>

The information contained within 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 liability arising out of the use of any part or document.

FMCA2356-60 CAD Drawing


QMA Male to QMA Male Right Angle Low PIM Cable 60 Inch Length Using TFT-5G-402 Coax Using Times Microwave Components



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, ONE LABEL FOR ALL LENGTHS OF CABLE.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
4. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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 Fairview Microwave® an INFINIT® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
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] ±.60 [15.24] = ±.2 [5.1] / -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] = ±.8 [20.3] / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		DESCRIPTION: QMA MALE TO QMA MALE RIGHT ANGLE LOW PIM CABLE USING TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS	
SIZE	A	CAGE CODE	3FKR5
DRAWN BY	DMAY	ITEM NO.	FMCA2356
REV	D		