

RA FAKRA Code Z / Water Blue Jack to
SMA Male Cable RG-174 Coax



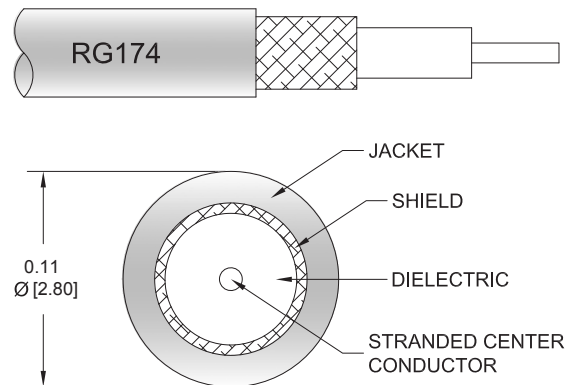
FMCA10061

Configuration

- Connector 1: FAKRA Jack Right Angle
- Connector 2: SMA Male
- Cable Type: RG-174
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

The RA FAKRA Code / Water Blue jack to SMA male cable using RG174 coax, part number FMCA10061, from Fairview Microwave is in-stock and ships same day. This Fairview FAKRA to SMA cable assembly has a jack to male gender configuration with 50 ohm flexible RG-174 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10061 FAKRA jack to SMA male cable assembly operates to 1 GHz. The right angle FAKRA interface on the RG-174 cable allows for easier connections in tight spaces.

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		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency				MHz	
FMCA10061	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.14	0.21	0.32	dB/ft	
			0.28	0.45	0.7	1.05	dB/m	
FMCA10061-12	12 Inch	Insertion Loss (Typ.)	0.54	0.59	0.67	0.77	dB	0.161
FMCA10061-24	24 Inch	Insertion Loss (Typ.)	0.62	0.73	0.88	1.09	dB	0.298
FMCA10061-36	36 Inch	Insertion Loss (Typ.)	0.71	0.87	1.09	1.41	dB	0.435
FMCA10061-48	48 Inch	Insertion Loss (Typ.)	0.79	1	1.3	1.73	dB	0.572
FMCA10061-72	72 Inch	Insertion Loss (Typ.)	0.96	1.28	1.72	2.37	dB	0.661

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:	0.25 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.161 pounds
Additional Weight per Inch:	0.07833 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.161 lbs [73.03 g]

Cable

Cable Type	RG-174
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

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Connectors

Description	Connector 1	Connector 2
Type	FAKRA Jack Right Angle	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Color	WB	
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		15 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel
Body Plating Specification		200 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		200 µin minimum

Environmental Specifications

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

Plotted and Other Data

Notes:

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Typical Performance Data

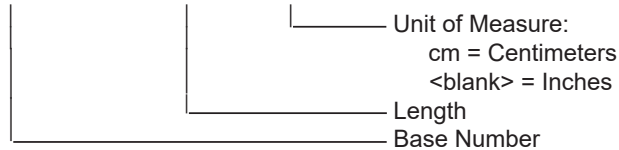
How to Order

Part Number Configuration:

FMCA10061

- xx

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Example: FMCA10061-12 = 12 inches long cable
FMCA10061-100cm = 100 cm long cable

RA FAKRA Code Z / Water Blue Jack to SMA Male Cable RG-174 Coax 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.

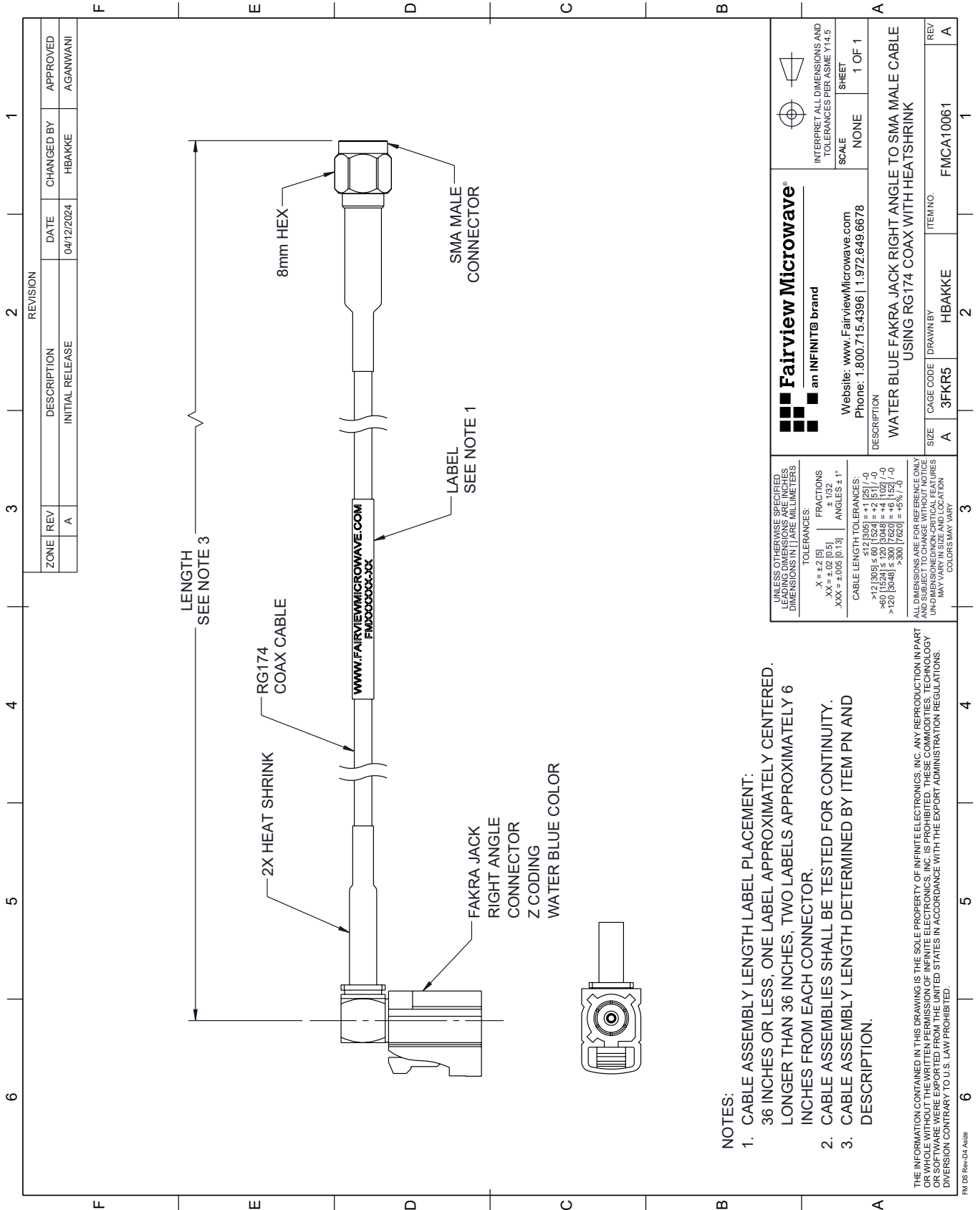
For additional information on this product, please click the following link: [RA FAKRA Code Z / Water Blue Jack to SMA Male Cable RG-174 Coax FMCA10061](#)

URL: <https://www.fairviewmicrowave.com/ra-fakra-jack-to-sma-male-cable-rg-174-coax-fmca10061-p.aspx>

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.

FMCA10061 CAD Drawing

RA FAKRA Code Z / Water Blue Jack to SMA Male Cable RG-174 Coax



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	04/12/2024	HBAKKE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 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
DESCRIPTION WATER BLUE FAKRA JACK RIGHT ANGLE TO SMA MALE CABLE USING RG-174 COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	HBAKKE	FMCA10061

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 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.6% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

- 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.
 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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