

Dual Junction Isolator SMA Female with 40 dB Isolation from 2 GHz to 4 GHz Rated to 50 Watts

The FMIR1017 is a dual junction isolator offering 40 dB minimum of isolation over a frequency band of 2 to 4 GHz. This coaxial part uses SMA female connectors on all ports and has a power rating of 50 Watts in forward and 2 Watts in reverse direction.

Fairview Microwave offers a wide variety of isolators to fit your needs. These are two-port devices that transmit microwave or radio frequency power in one direction only and block the signal in the opposite direction. They can be thought of as a diode for RF energy. Isolators are used to isolate equipment from the effects of conditions outside of the equipment. For instance they are used to prevent a microwave source being detuned by a mismatched load. Fairview's isolators feature excellent insertion loss, high isolation and reliability, low VSWR, and a wide dynamic temperature range.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	2		4	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Isolation	40			dB
VSWR			1.3:1	
Forward Power, CW			50	Watts
Reverse Power, CW			2	Watts

Electrical Specification Notes:

Electrical Performance Is Guaranteed Only At 25C Ambient

Mechanical Specifications

Size	
Length	3.2 in [81.28 mm]
Width	0.6 in [15.24 mm]
Height	1.6 in [40.64 mm]
Weight	0.347 lbs [157.4 g]

Configuration

Design	Dual Junction
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature	
Operating Range	0 to +50 deg C

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

Plotted and Other Data

Notes:



Features:

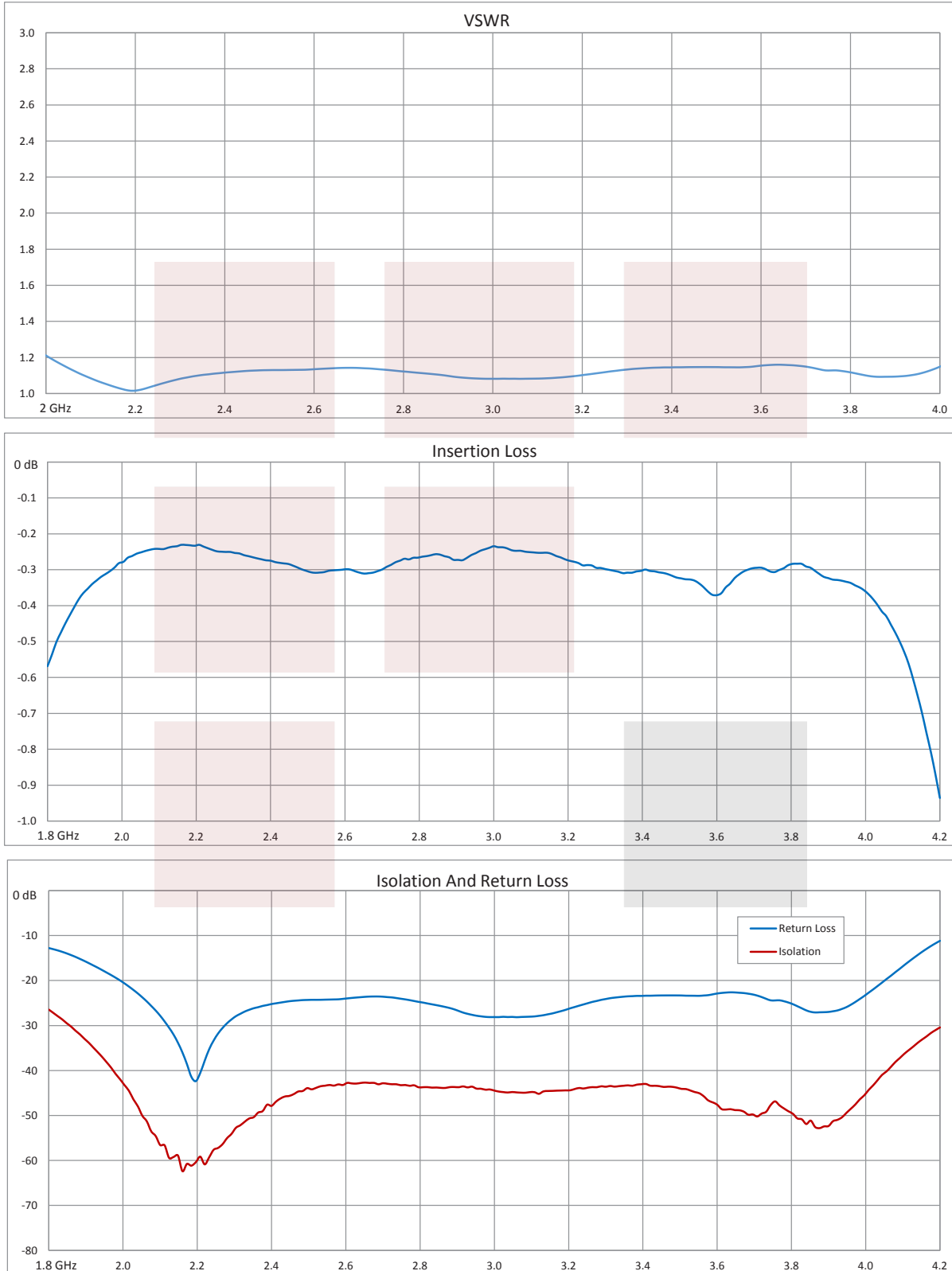
- High Isolation of 40 dB
- Frequency Range of 2 to 4 GHz
- Female SMA Connectors
- VSWR of 1.3:1

Applications:

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



Dual Junction Isolator SMA Female with 40 dB Isolation from 2 GHz to 4 GHz Rated to 50 Watts 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.

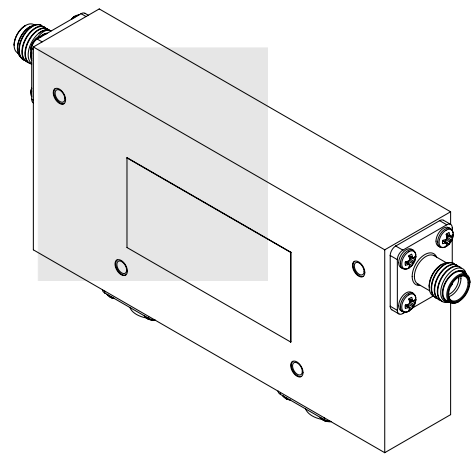
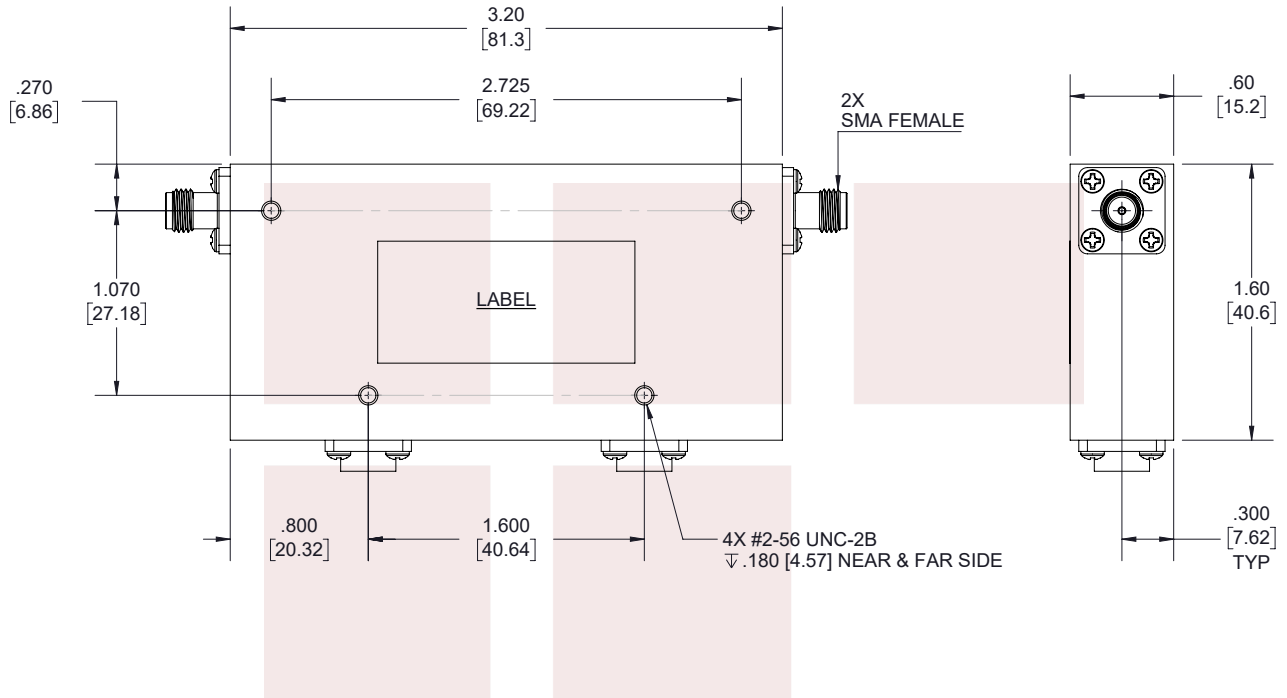
For additional information on this product, please click the following link: [Dual Junction Isolator SMA Female with 40 dB Isolation from 2 GHz to 4 GHz Rated to 50 Watts FMIR1017](#)

URL: <https://www.fairviewmicrowave.com/dual-junction-isolator-sma-female-40db-isolation-4-ghz-50-watts-fmir1017-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	PCR PE83IR1019	3/3/2020	J.GARCIA



LABEL:

FMIR1017	
1	2
2.00 - 4.00 GHz	
DC WWWW	

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TITLE

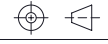
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMIR1017	REV A
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T-Rev.D