

WR-15 Waveguide Down Converter Mixer From 50 GHz to 75 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-385/U Flange

The FMMD1002 is a full waveguide band down converter mixer with an LO and RF frequency range of 50 to 75 GHz (V Band). The IF frequency range is DC to 18 GHz with a nominal LO drive level of +13 dBm. The double balanced circuit design utilizes high performance GaAs Schottky beam lead diodes. Conversion loss is 8 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-15 with UG-385/U-MOD waveguide flange interfaces for the RF and LO ports and a female SMA connector for the IF port.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	50		75	GHz
LO Frequency Range	50		75	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		8		dB
LO Port Power		13	15	dBm

Mechanical Specifications

Size	
Length	1.4 in [35.56 mm]
Width/Diameter	0.75 in [19.05 mm]
Height	0.75 in [19.05 mm]
Weight	0.0625 lbs [28.35 g]

Configuration

Design Down Converter

Description	RF Port	LO Port	IF Port
Type	WR-15	WR-15	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:

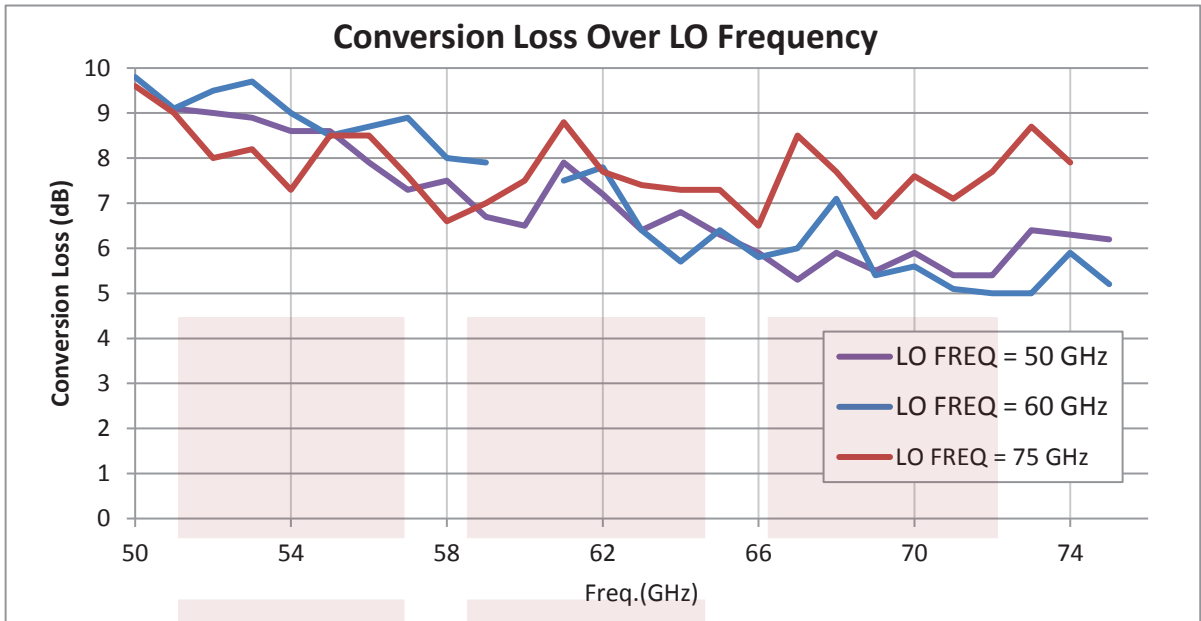
- V Band (50 to 75 GHz) full waveguide Down converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-15 with UG-385/U-MOD Flange
- Double Balanced design
- Low Capacitance GaAs Schottky Beam Lead diodes
- Gold Plated Compact Package Design
- Operating Temperature: 0°C to +50°C

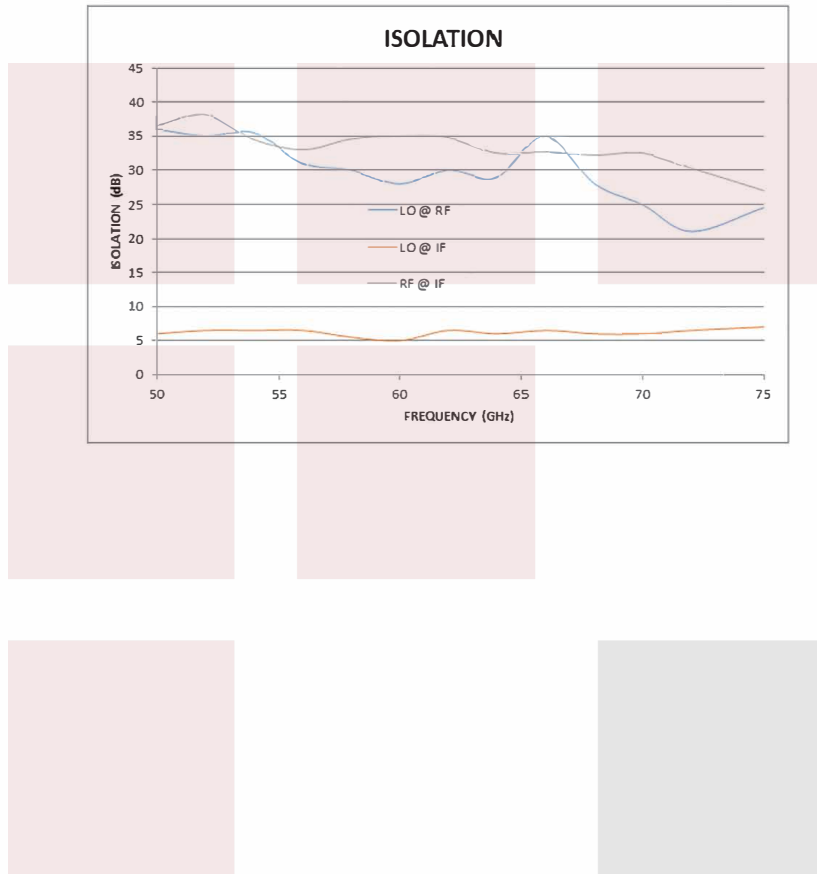
Applications:

- Receiver Subsystems
- Military Communications
- Commercial Communications
- Instruments and Test Equipment

Fairview Microwave
 1130 Junction Dr. #100
 Allen, TX 75013
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



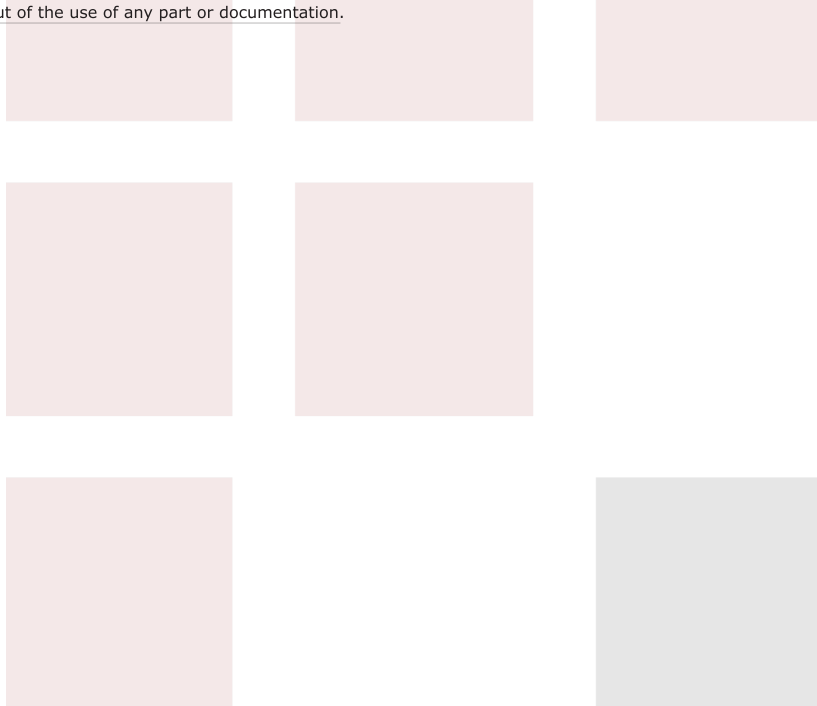


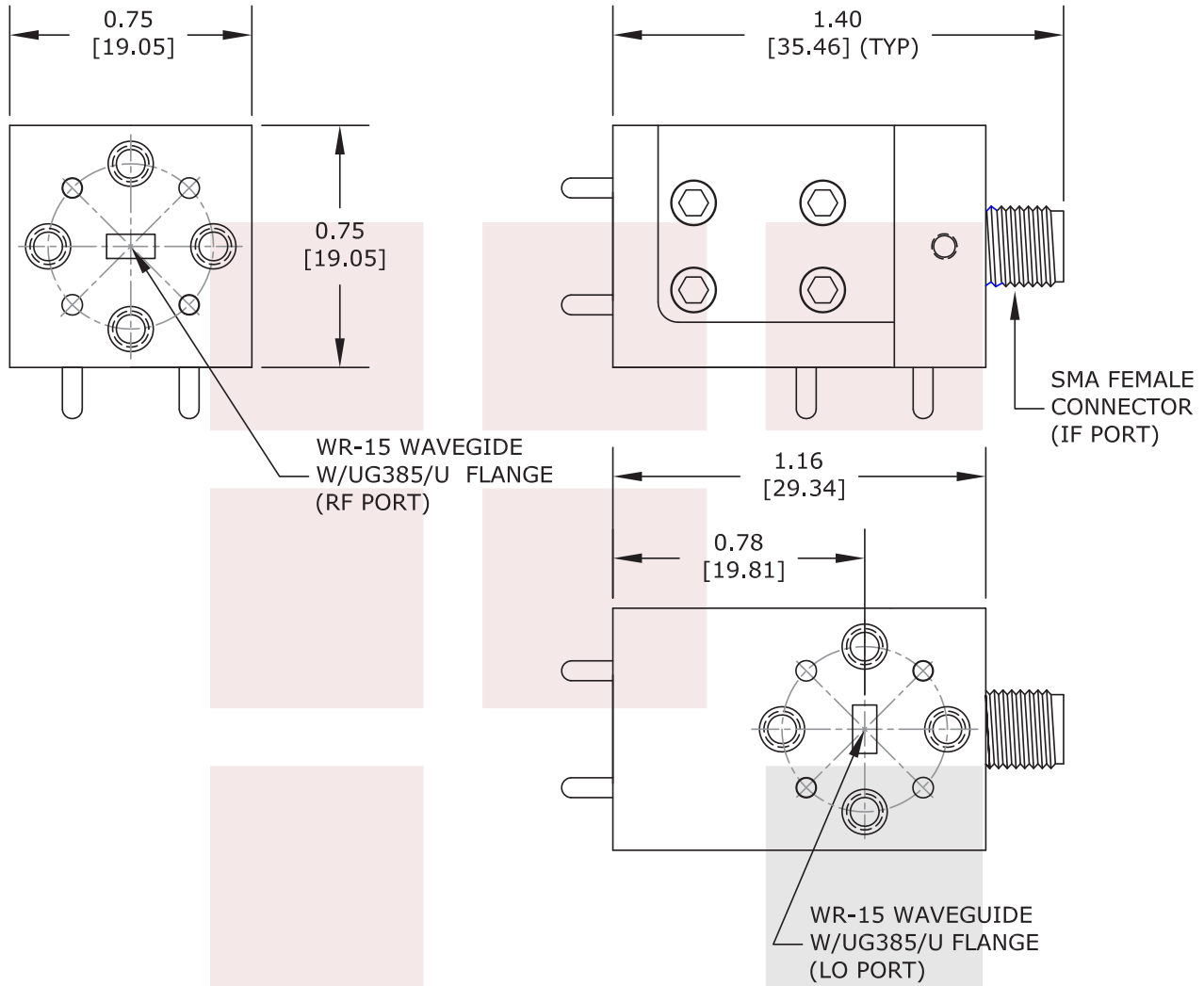
WR-15 Waveguide Down Converter Mixer From 50 GHz to 75 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-385/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-15 Waveguide Down Converter Mixer From 50 GHz to 75 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-385/U Flange FMMD1002](#)

URL: <https://www.fairviewmicrowave.com/wr-15-waveguide-mixer-down-converter-50-75-ghz-ug-385-u-fmmd1002-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.





UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN: inches
 TOLERANCES ARE: [mm]
 .XX ± .01 [±.25]
 .XX ±.001 [±.025]

* THESE DIMENSIONS AND TOLERANCES
 SUPERSEDE NOTE #1 ON TITLE BLOCK.

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE WR-15 Waveguide Down Converter Mixer From 50 GHz to 75 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-385/U Flange		DWG NO FMMD1002		CAGE CODE 3FKR5	
CAD FILE	072015	SHEET	SCALE	N/A	SIZE A 2233