



# WR-28 Waveguide Mixer Up Converter From 26.5 GHz to 40 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-599/U Flange

The FMMU1005 is a full waveguide band up converter mixer with an LO and RF frequency range of 26.5 to 40 GHz (Ka 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 6 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-28 with UG-599/U-MOD waveguide flange interfaces for the RF and LO ports and a female SMA connector for the IF port.



Description	Min	Тур	Max	Units
Frequency Range	26.5		40	GHz
LO Frequency Range	26.5		40	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		6		dB
LO Port Power		13	15	dBm

## **Mechanical Specifications**

Size

 Length
 1.24 in [31.5 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 Mixer Up Converter

Description	RF Port	LO Port	IF Port	
Туре	WR-28 UG-599/U	WR-28 UG-599/U	SMA Female	

# **Environmental Specifications Temperature**

Operating Range

0 to +50 deg C



**Compliance Certifications** (visit www.FairviewMicrowave.com for current document)

#### **Plotted and Other Data**

Notes:



#### Features:

- Ka Band (26.5 to 40 GHz) full waveguide up converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-28 with UG-599/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:

- Transmitter 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-28 Waveguide Mixer Up Converter From 26.5 GHz to 40 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-599/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.

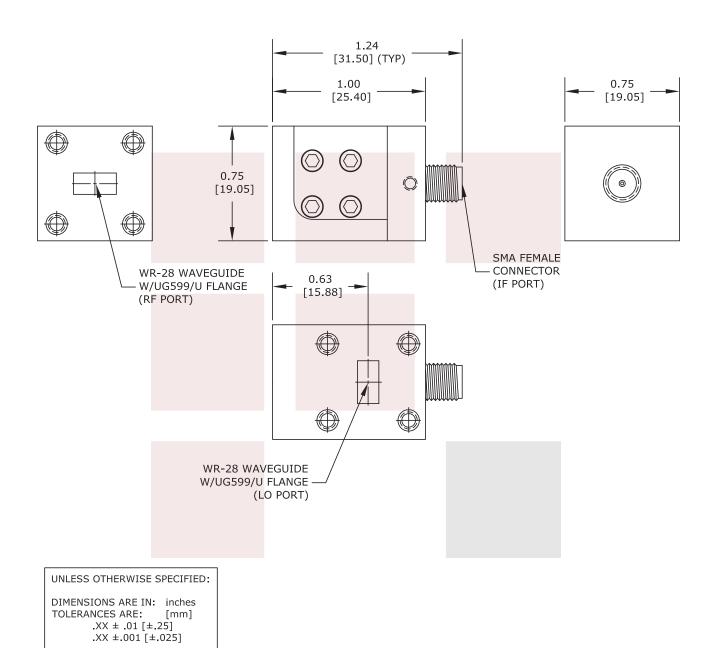
For additional information on this product, please click the following link: WR-28 Waveguide Mixer Up Converter From 26.5 GHz to 40 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-599/U Flange FMMU1005

URL: http://www.fairviewmicrowave.com/wr-28-waveguide-mixer-up-converter-26.5-40-ghz-ug-599-u-fmmu1005-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.







\* 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].					
WR-28 Waveguide Mixer Up Converter From 26.5 GHz to 40 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-599/U Flange	DWG NO FMMU1005			CAGE CODE 3FKR5		
	CAD FILE 072015	SHEET	SCALE N	N/A S	SIZE A	2233