



# WR-10 Waveguide Mixer Up Converter From 75 GHz to 110 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-387/U Flange

The FMMU1000 is a full waveguide band up converter mixer with an LO and RF frequency range of 75 to 110 GHz (W 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 9 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-10 with UG-387/U-MOD waveguide flange interfaces for the RF and LO ports and a female SMA connector for the IF port.



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Description	Min	Тур	Max	Units
Frequency Range	75		110	GHz
LO Frequency Range	75		110	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		9		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 Mixer Up Converter

Description	RF Port	LO Port	IF Port		
Туре	WR-10 UG-387/U	WR-10 UG-387/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:

- W Band (75 to 110 GHz) full waveguide up converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-10 with UG-387/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

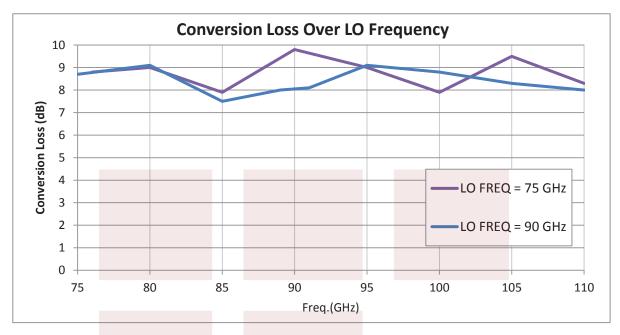
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#### **Typical Performance Data**



WR-10 Waveguide Mixer Up Converter From 75 GHz to 110 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-387/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.

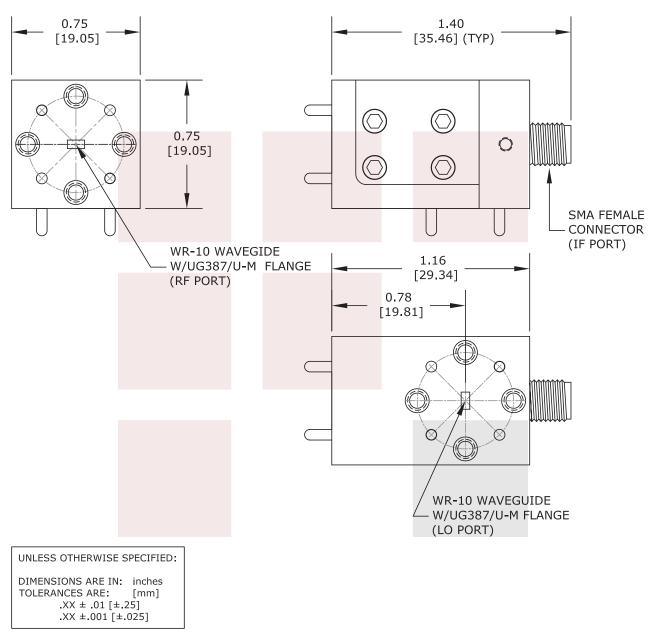
For additional information on this product, please click the following link: WR-10 Waveguide Mixer Up Converter From 75 GHz to 110 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-387/U Flange FMMU1000

URL: http://www.fairviewmicrowave.com/wr-10-waveguide-mixer-up-converter-75-110-ghz-ug-387-u-fmmu1000-p.aspx

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	CAD FILE 072015	SHEET	SCAL	E N/A	SIZE A	2233