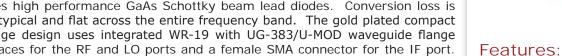




# WR-19 Waveguide Mixer Up Converter From 40 GHz to 60 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange

The FMMU1003 is a full waveguide band up converter mixer with an LO and RF frequency range of 40 to 60 GHz (U 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 7 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-19 with UG-383/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	40		60	GHz
LO Frequency Range	40		60	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		7		dB
LO Port Power		13	15	dBm

## **Mechanical Specifications**

**Size** 

Length 1.5 in [38.1 mm] Width/Diameter 1.13 in [28.7 mm] Height 1.13 in [28.7 mm] Weight 0.0625 lbs [28.35 g]

Configuration

Design Mixer Up Converter

Description	RF Port	LO Port	IF Port
Туре	WR-19 UG-383/U	WR-19 UG-383/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:



- U Band (40 to 60 GHz) full waveguide up converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-19 with UG-383/U-MOD Flange
- · Double Balanced design
- Low Capacitance GaAs Schottky Beam Lead diodes
- Gold Plated Compact Package Design
- · Operating Temperature:  $0^{\circ}$ C to  $+50^{\circ}$ C

## Applications:

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

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013

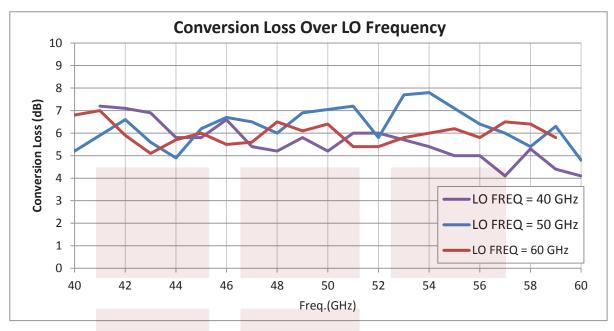
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## **Typical Performance Data**



WR-19 Waveguide Mixer Up Converter From 40 GHz to 60 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/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.

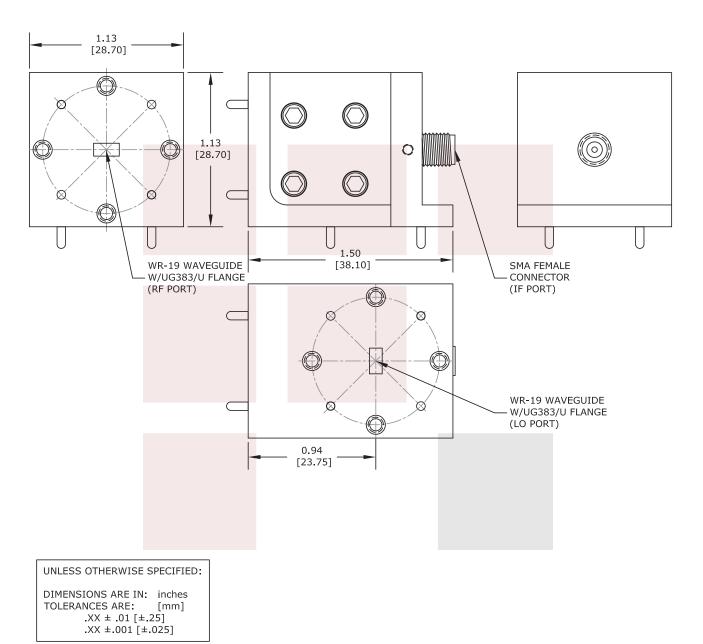
For additional information on this product, please click the following link: WR-19 Waveguide Mixer Up Converter From 40 GHz to 60 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange FMMU1003

URL: http://www.fairviewmicrowave.com/wr-19-waveguide-mixer-up-converter-40-60-ghz-ug-383-u-fmmu1003-p.aspx

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<sup>\*</sup> THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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WR-19 Waveguide Mixer Up Converter From 40 GHz to 60 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange	DWG NO FMMU1003			CAGE CODE 3FKR5			
	CAD FILE 072015	SHEET	SCAL	E N/A	SIZE A	2233	