

**WR-22 Waveguide Mixer Down Converter From 33 GHz to 50 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange**

The FMMD1004 is a full waveguide band down converter mixer with an LO and RF frequency range of 33 to 50 GHz (Q 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 6.5 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-22 with UG-383/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	33		50	GHz
LO Frequency Range	33		50	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		6.5		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 Down Converter

Description	RF Port	LO Port	IF Port
Type	WR-22 UG-383/U	WR-22 UG-383/U	SMA Female

**Environmental Specifications**

**Temperature**

Operating Range 0 to +50 deg C



**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

**Plotted and Other Data**

Notes:

**Features:**

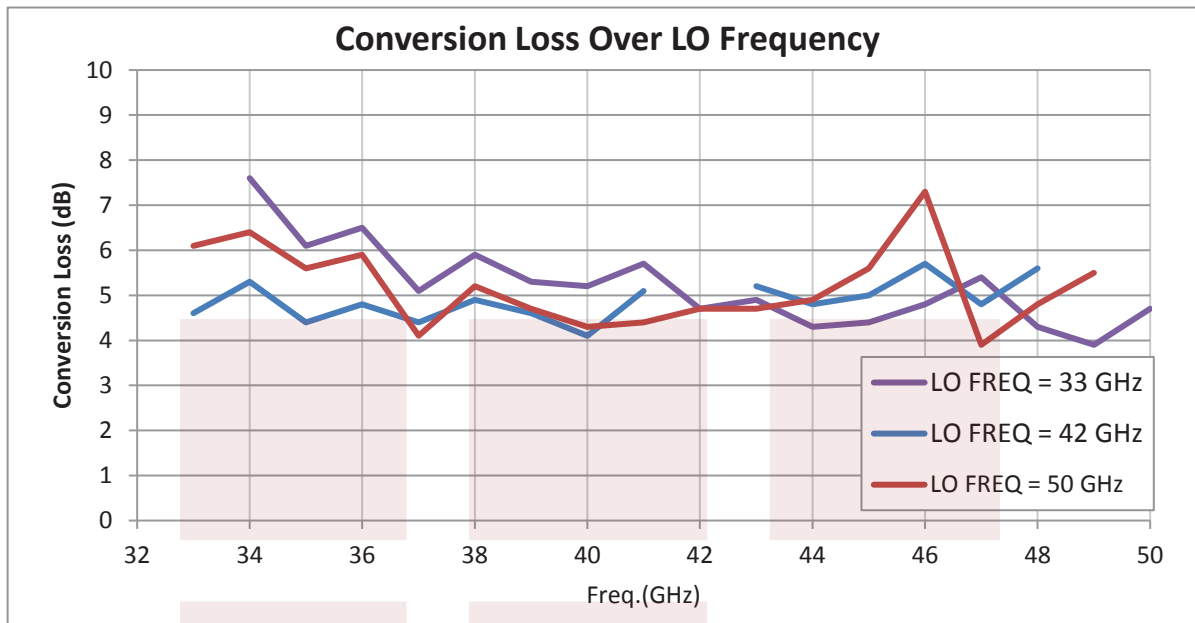
- Q Band (33 to 50 GHz) full waveguide Down converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-22 with UG-383/U-MOD Flange
- Double Balanced design
- Low Capacitance GaAs Schottky Beam Lead diodes
- Gold Plated Compact Package Design
- Operating Temperature: 0°C to +50°C

**Applications:**

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

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Typical Performance Data

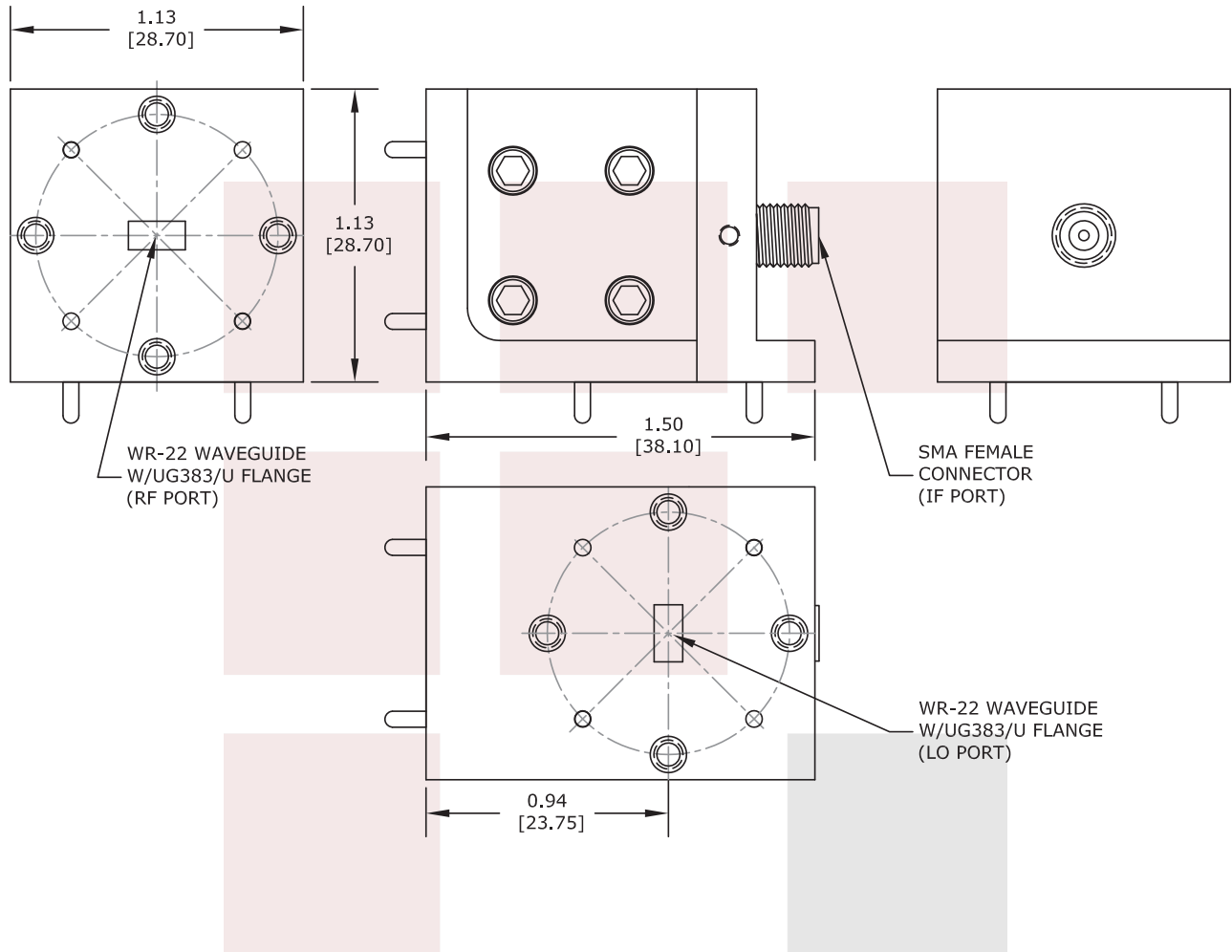


WR-22 Waveguide Mixer Down Converter From 33 GHz to 50 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-22 Waveguide Mixer Down Converter From 33 GHz to 50 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange FMMD1004](http://www.fairviewmicrowave.com/wr-22-waveguide-mixer-down-converter-33-50-ghz-ug-383-u-fmmd1004)

URL: <http://www.fairviewmicrowave.com/wr-22-waveguide-mixer-down-converter-33-50-ghz-ug-383-u-fmmd1004-p.aspx>

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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.

<b>FAIRVIEW MICROWAVE INC.</b> 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-22 Waveguide Mixer Down Converter From 33 GHz to 50 GHz, With an IF Range From DC to 18 GHz And LO Power of +13 dBm, UG-383/U Flange		DWG NO <b>FMMD1004</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	072015	SHEET	SCALE	N/A	SIZE A 2233