



Millimeter-Wave Harmonic Mixer 33 - 55GHz

Features

- Broadband, up to 325GHz
- Fundamental and harmonic mixer
- High dynamic range, low noise figure
- Customization available upon request



Electrical Specifications, $T_A=25^\circ\text{C}$

Parameter	Min.	Typ.	Max.	Units
RF Input Frequency	33		55	GHz
IF Output Frequency	4.13		6.25	MHz
Conversion Loss			28	dB
Input 1dB Compression (P1dB)		5		dBm
In-Band Spurious Rejection		-50		dBc
Harmonic Number		10		
LO Power	12		18	dBm
Conversion Response		± 2.5		dB
Bias Voltage			10	V
RF / LO/ IF Connectors	WR-22/SMA-Female/SMA-Female			

Environmental Specifications and Test Standards

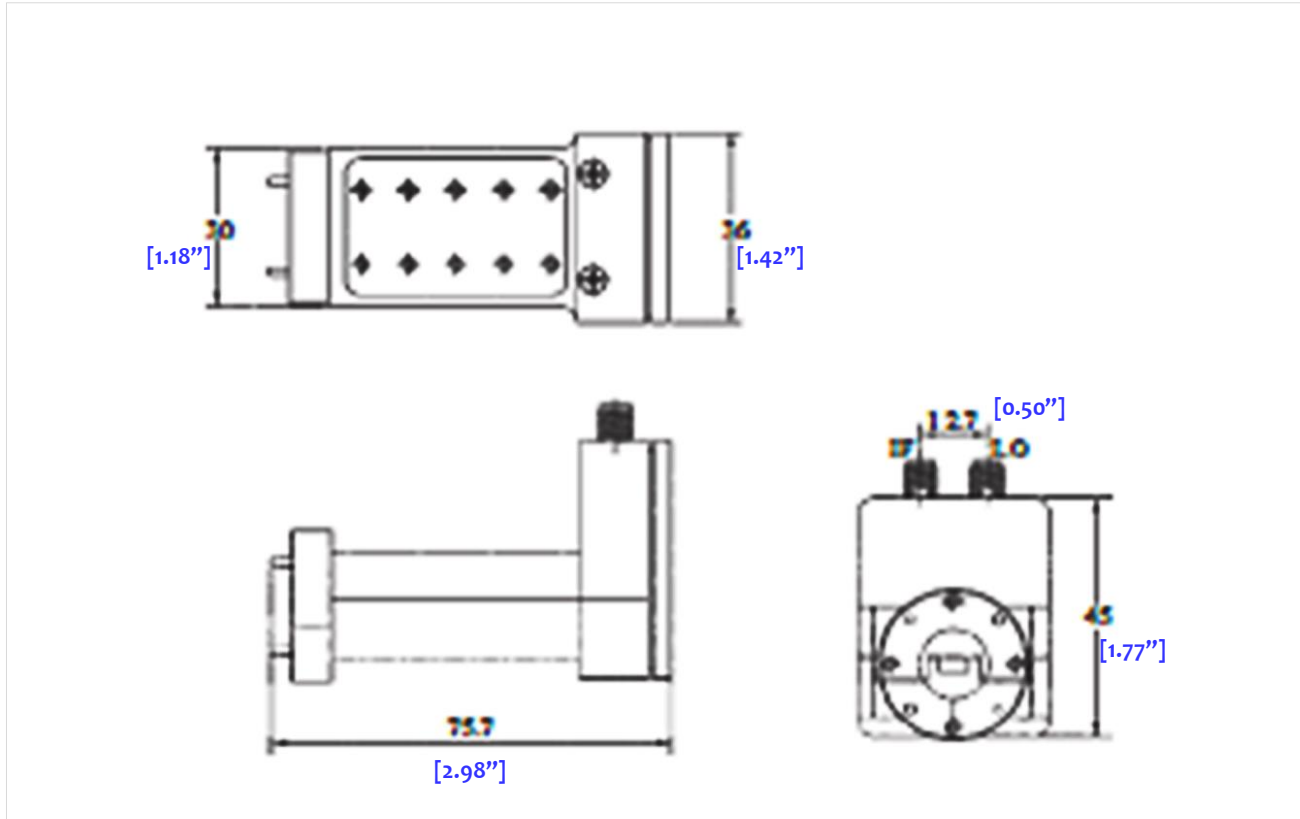
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

Millimeter-Wave Harmonic Mixer 33 - 55GHz



Outline Drawing:

All Dimensions in mm [inches]



Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.