SFH-22SFSF-A3

Advanced

Q-Band Harmonic Mixer, Keysight Spectrum Analyzer

Description:

Model SFH-22SFSF-A3 is a Q-Band balanced harmonic mixer that is specially designed for use with Keysight's spectrum analyzer series. The mixer employs high performance, GaAs Schottky flip chip diodes and a balanced configuration to produce superior RF performance. With an IF range of DC to 1.3 GHz, the harmonic mixer uses the harmonic number 10 of a 3.0 to 6.1 GHz LO at +16 dBm to translate 33 to 50 GHz. The harmonic mixer has a conversion loss of 40 dB.

Features:

- Full Waveguide Band Operation
- No External Bias Required
- 10th Harmonic Detection

Applications:

- Keysight Spectrum Analyzers
- Frequency Meters
- Phase Locked Loops

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Frequency	33 GHz		50 GHz
LO Frequency	3 GHz		6.1 GHz
IF Frequency	DC		1.3 GHz
Input Power		+16 dBm	+19 dBm
Number of Harmonics		10	
Conversion Loss		33 dB	
Specification Temperature		+25 ˚C	
Operation Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
RF Port	WR-22 Waveguide with UG-383/U Flange
LO Port	SMA (F)
IF Port	SMA (F)
Case Material	Brass
Finishing	Gold Plated
Weight	5.5 Oz
Outline	FH-Q2

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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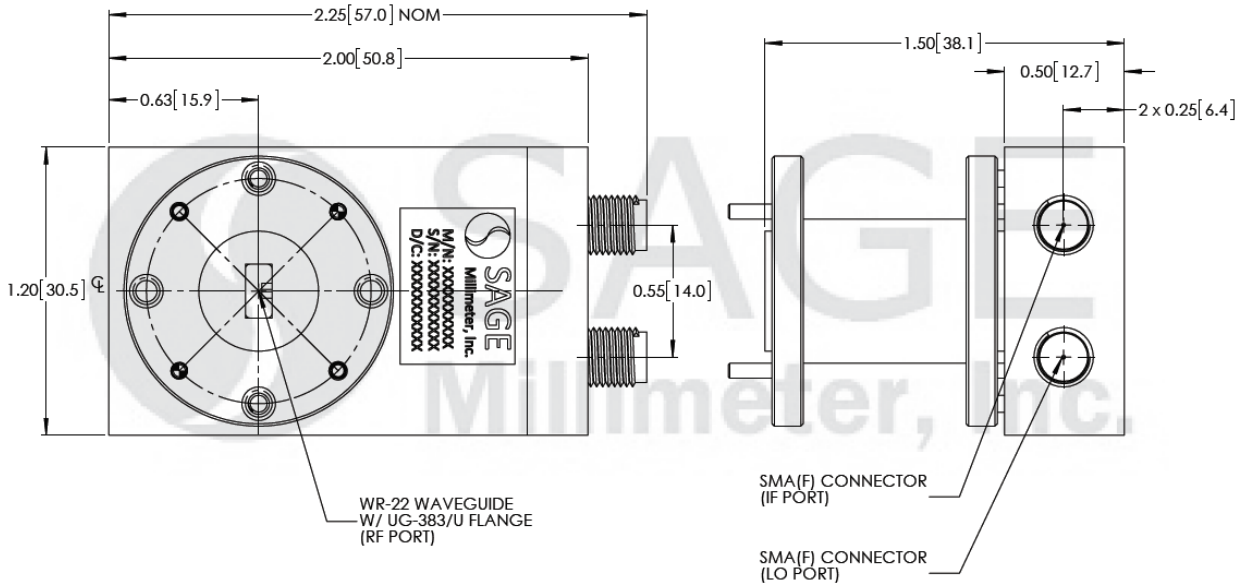
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the mixer will damage the device.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.
- The mixer is a static sensitive device. Always follow ESD rules when working with the mixer.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

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