



Dielectric Resonator Oscillator, 37 GHz, +13 dBm

Description:

Model **SOD-37301213-22-S1** is a mechanically tuned, dielectric resonator oscillator with a center frequency of 37 GHz and a mechanical tuning range of ± 50 MHz. The oscillator delivers a nominal output power of +13 dBm with a low phase noise and harmonic emissions. The oscillator takes a +8 V_{DC}/500 mA DC bias. The RF output is equipped with WR-22 waveguide.



Features:

- Low AM/FM Noise and Harmonics
- Mechanically Tunable

Applications:

- Test Sources
- Signal Generation
- Lab Test Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Center Frequency		37 GHz	
Power Output		+13 dBm	
Mechanical Tuning Range		± 50 MHz	
Frequency Stability			± 4 ppm
Phase Noise @ 100 kHz Offset		-95 dBc/Hz	
Spurious			-75 dBc
Harmonics			-25 dBc
Bias Voltage	+6 V _{DC}	+8 V _{DC}	+12 V _{DC}
Bias Current		500 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

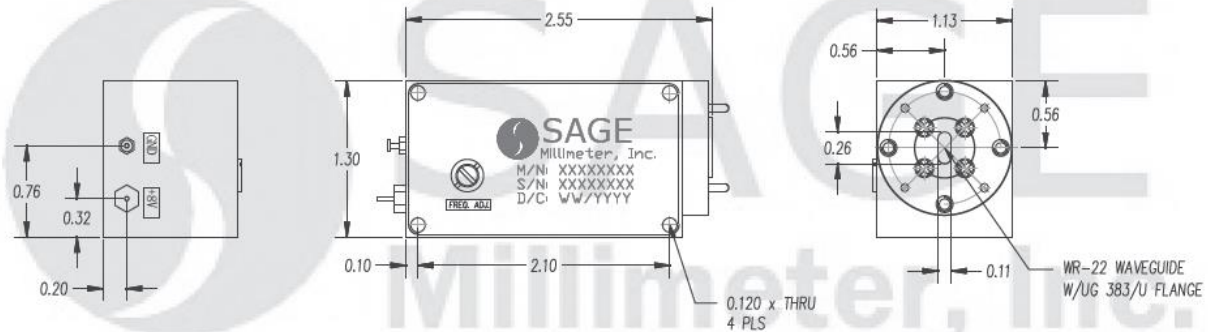
Mechanical Specifications:

Item	Specification
RF Port	WR-22 Waveguide with UG383/U Flange
DC Bias	Solder Pin
Case Material	Aluminum
Finish	Chem Film
Weight	5.2 Oz
Size	2.55" (L) x 1.30" (W) x 1.13" (H)
Outline	OD-FQ22



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



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Reversing polarity bias will destroy the device.
- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- The case temperature of the device shall never exceed **+50°C**. Use additional heatsink or fan if necessary.

