SOD-24301215-SF-S1

Rev. 1.1

Dielectric Resonator Oscillator, 24 GHz, +15 dBm

Description:



Model SOD-24301215-SF-S1 is a mechanically tuned, dielectric resonator oscillator with a center frequency of 24 GHz and a mechanical tuning range of ±50 MHz. The oscillator delivers a nominal output power of +15 dBm with a low phase noise and harmonic emissions. The oscillator takes a +12 V_{DC}/125 mA DC bias. The RF output is equipped with a female SMA connector.

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		24 GHz	
Power Output		+15 dBm	
Mechanical Tuning Range		±50 MHz	
Frequency Stability			±5 ppm/°C
Phase Noise @ 10 KHz Offset		-80 dBc/Hz	
Spurious			-65 dBc
Subharmonics and Harmonics			-10 dBc
Bias Voltage	+10 V_{DC}	+12 V_{DC}	+15 V_{DC}
Bias Current		125 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
RF Port	SMA (F)
DC Bias	Solder Pin
Case Material	Aluminum
Finish	Chem Film
Weight	4 Oz
Size	1.85” (L) x 1.00” (W) x 0.90” (H)
Outline	OD-FCK-P1

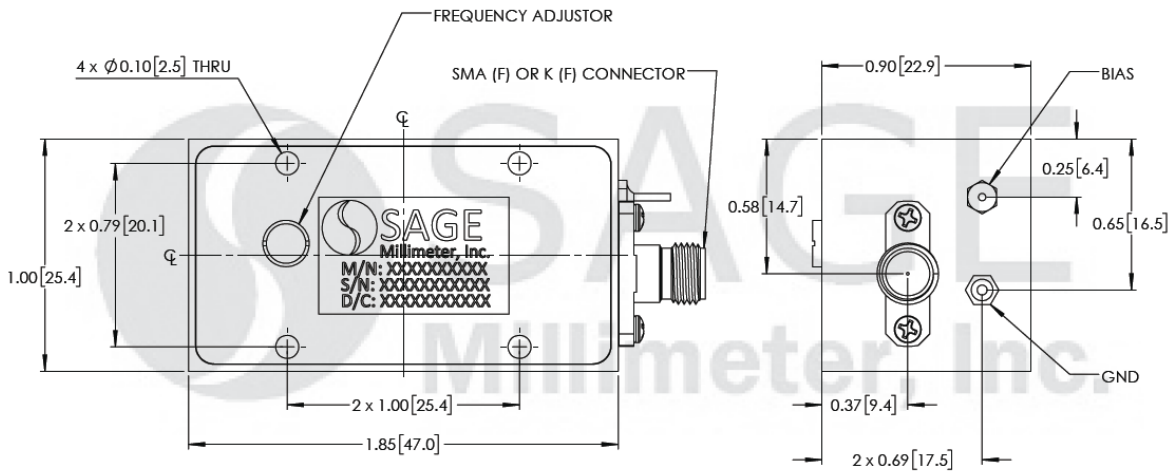
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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches[millimeters])



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- 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.
- The case temperature of the device shall never exceed **+50˚C**. Use additional heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

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