SOD-96202217-SF-S1

Rev. 1.1

Dielectric Resonator Oscillator, 9.6 GHz, +17 dBm

Description:

Model SOD-96202217-SF-S1 is a mechanically tuned, dielectric resonator oscillator with a center frequency of 9.6 GHz and a mechanical tuning range of ±100 MHz. The oscillator delivers a nominal output power of +17 dBm with a low phase noise and harmonic emissions. The oscillator takes a +12 V_{DC}/90 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		9.6 GHz	
Power Output		+17 dBm	
Mechanical Tuning Range		±100 MHz	
Frequency Stability			±4 ppm/°C
Phase Noise @ 100 KHz Offset		-100 dBc/Hz	
Spurious			-75 dBc
Harmonics			-25 dBc
Bias Voltage		+12 V_{DC}	
Bias Current		90 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

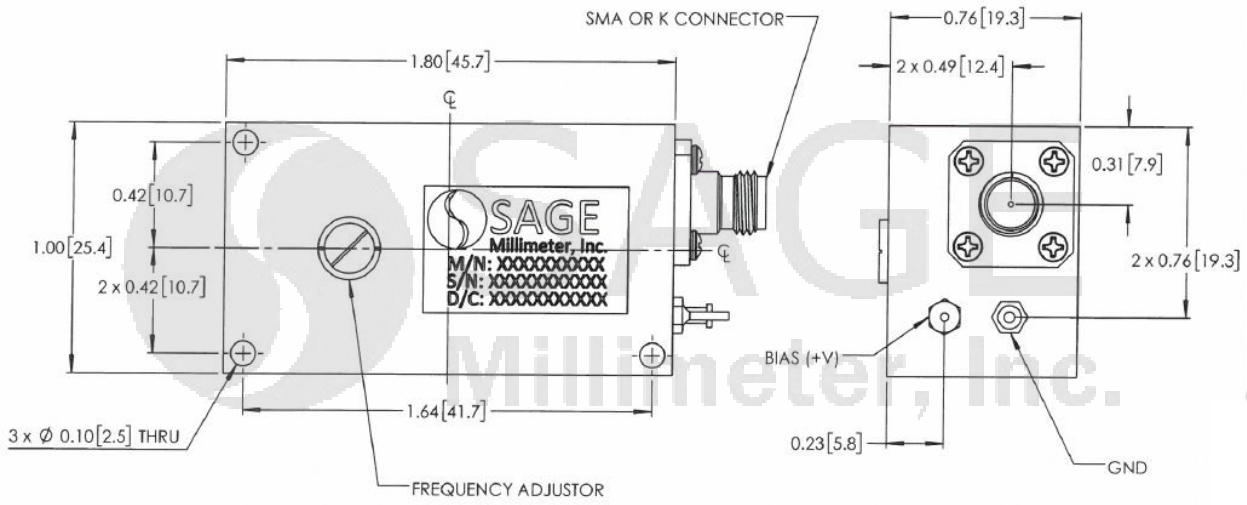
Mechanical Specifications:

Item	Specification
RF Port	SMA (F)
DC Bias	Solder Pin
Finish	Chem Film
Weight	3.8 Oz
Size	1.80” (L) x 1.00” (W) x 0.76” (H)
Outline	OD-FSX

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

Dielectric Resonator Oscillator, 9.6 GHz, +17 dBm

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.**