

## Band Phase Locked Oscillator, 39 GHz, Internally Referenced

### Description:

**Model SOP-39310115-KM-I1** is a phase locked oscillator with a typical output frequency of 39 GHz and a nominal output power of +15 dBm. The PLO is internally referenced. The low phase noise of the oscillator is attributed to the quality of the internal reference source. The oscillator has a typical harmonic suppression of -25 dBc and spurious of -75 dBc with a phase noise of -100 dBc/Hz at 10 KHz offset. A female K connector at the RF output port is available under model SOP-39310115-KF-I1.



### Features:

- High Output Power
- Low Phase Noise
- Low Harmonic Components

### Applications:

- Radar Systems
- Communication Links
- Transmitters and Receivers

### Electrical Specifications:

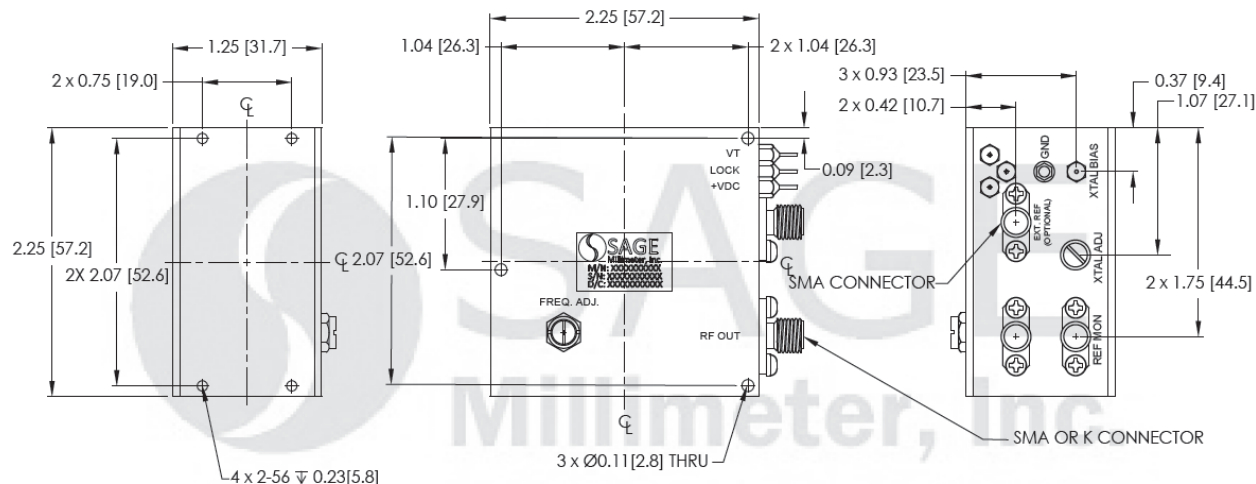
Parameter	Minimum	Typical	Maximum
Frequency		39 GHz	
Output Power		+15 dBm	
Phase Noise (Internally Referenced) @ 10 kHz		-100 dBc/Hz	
Harmonic Suppression		-25 dBc	
Spurious		-75 dBc	
DC Voltage Supply		+12 Vdc	
Frequency Stability (Internally Referenced)		±5 ppm	
Operating Temperature	0°C		+50°C

### Mechanical Specifications:

Item	Specification
Output	K (M)
Bias	Solder Pin
Size	2.25" (W) 2.25" (L) X 1.25" (H)
Case Material	Aluminum
Finish	Nickel Plated
Weight	4 Oz
Outline	OP-DC-E3

## Band Phase Locked Oscillator, 39 GHz, Internally Referenced

**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 number.

**Caution:**

- 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 (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**