SOP-28310115-KF-I1

Advanced

Ka Band Phase Locked Oscillator, 28 GHz, Internally Referenced

Description:

Model SOP-28310115-KF-I1 is a phase locked oscillator with a typical output frequency of 28 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. The oscillator is provided with phase lock loop status indicator (TTL high: Locked) and phase loop healthy indicator (phase error). The externally referenced version is offered under model number SOP-28310115-KF-E1.

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		28 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	
DC Current		450 mA	
Phase Lock Loop Status (Locked)		TTL High	
Frequency Stability (Internally Referenced)		±5 ppm	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
RF Connector	K (F)
DC Bias Port	Solder Pin
Phase Lock Indicator	Solder Pin
Phase Error Voltage	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

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
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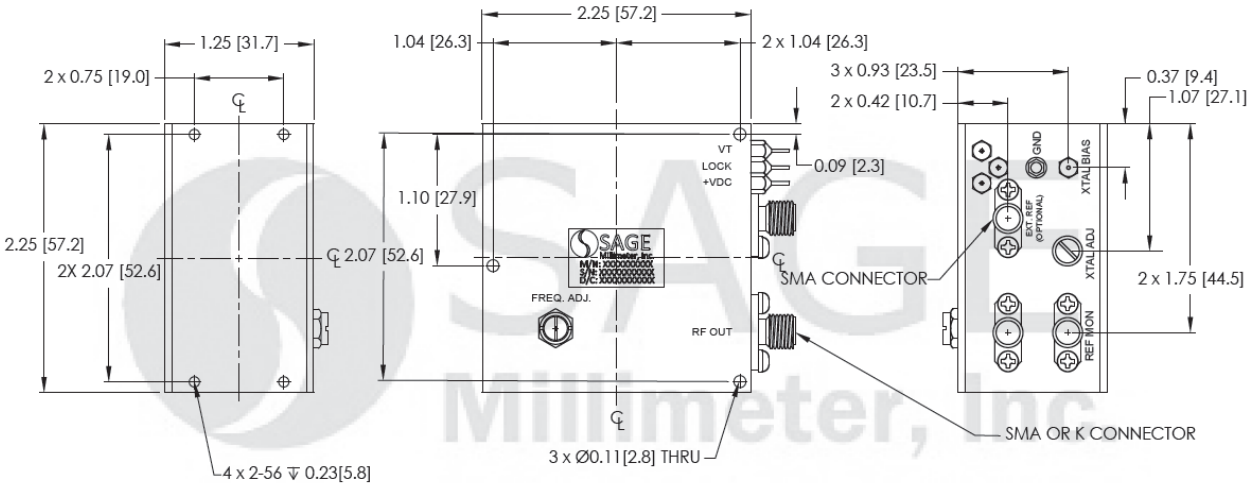
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

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

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