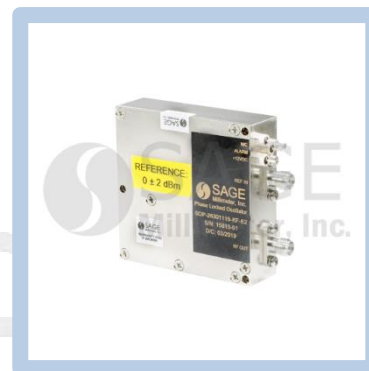




Phase Locked Oscillator, 16.0 GHz, Externally Referenced

Description:

Model SOP-16301210-SF-E1 is a phase locked oscillator with a typical output frequency of 16.0 GHz and a nominal output power of +10 dBm. The PLO is externally referenced. The oscillator is phase locked to external reference with a frequency of 100 MHz and typical power of 0 dBm. The phase noise of the oscillator is dependent on the quality of the reference source. The oscillator has a minimum harmonic suppression of -25 dBc and spurious of -75 dBc.



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		16.0 GHz	
Output Power		+10 dBm	
Phase Noise	Reference Source + 20 Log (N) + 3 dB		
Harmonic Suppression		-25 dBc	
Spurious		-75 dBc	
External Reference Frequency		100 MHz	
External Reference Input Power		+0 dBm	+3 dBm
Phase Locked Indicator	TTL "High"		
DC Voltage	+11.5 V _{DC}	+12 V _{DC}	+15 V _{DC}
DC Supply Current		250 mA	
Frequency Stability (Externally Referenced)	Same as reference		
Power Stability		±1 dB	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

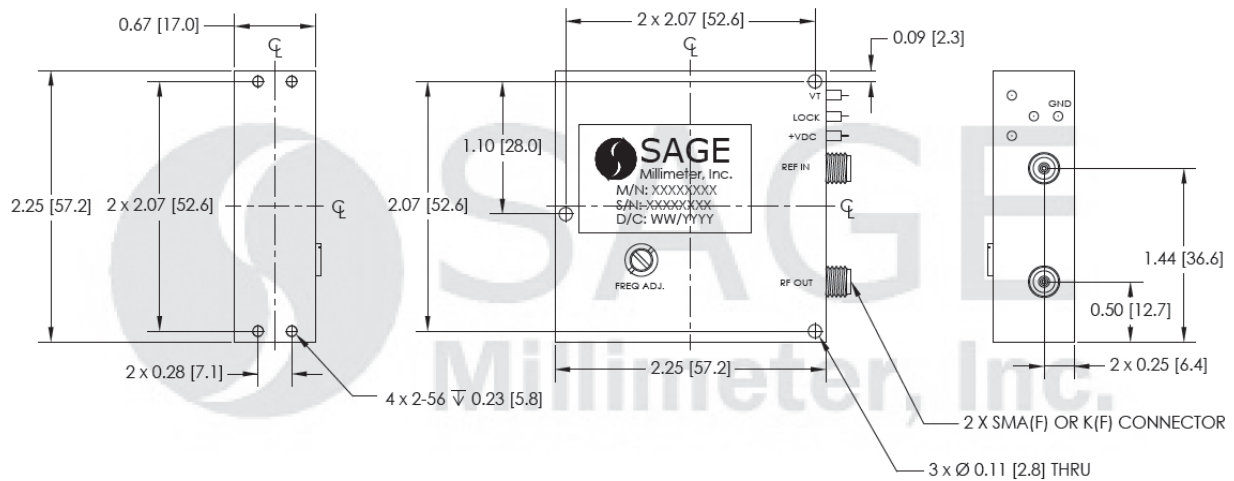
Item	Specification
RF Output Connector	SMA(F)
REF Input Connector	SMA(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Nickel Plated
Weight	4 Oz
Size	2.25" (W) X 2.25" (L) X 0.67" (H)
Outline	OP-EC-E2





Phase Locked Oscillator, 16.0 GHz, Externally Referenced

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:

- 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.**

