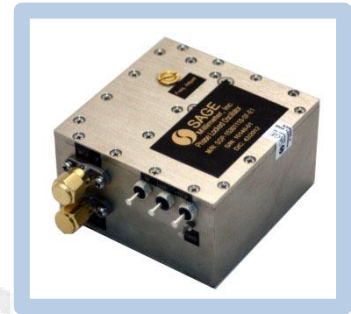




Phase Locked Oscillator, 14.5 GHz, Internally & Externally Referenced

Description:

Model SOP-15301110-SF-E1 is a phase locked oscillator with a typical output frequency of 14.5 GHz and a nominal output power of +10 dBm. The PLO is internally and externally referenced. The oscillator is phase locked to internal reference automatically if the external reference source is lost. 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 -70 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		14.5 GHz	
Output Power		+10 dBm	
Phase Noise (Internally Referenced) @ 10 kHz		-100 dBc/Hz	
Phase Noise (Externally Referenced)	Reference Source + 20 Log (N) + 3 dB		
Harmonic Suppression			-25 dBc
Spurious			-70 dBc
DC Voltage Supply		+12 Vdc	
DC Current		450 mA	
Frequency Stability (Externally Referenced)		±5 ppm	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

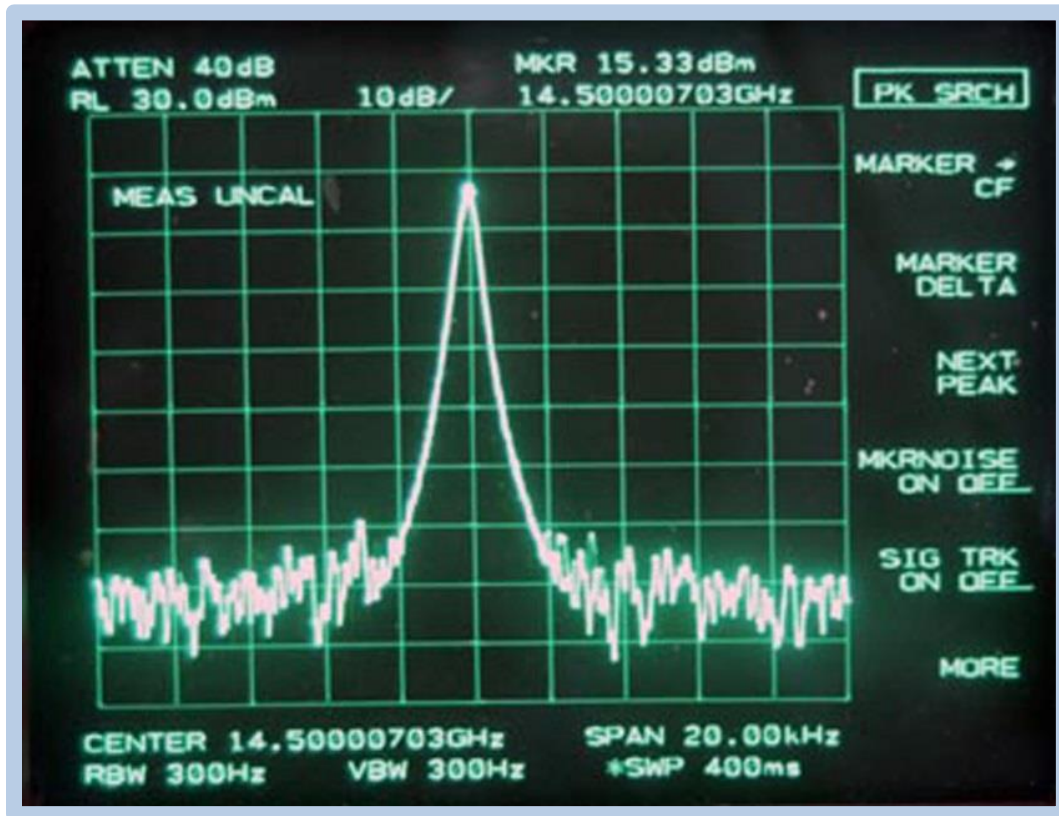
Item	Specification
Output	SMA(F) Connector
Bias	Solder Pin
Size	2.25" (W) 2.25" (L) X 1.33" (H)
Case Material	Aluminum
Finish	Nickel Plated
Weight	4 Oz
Outline	OP-E6-P3



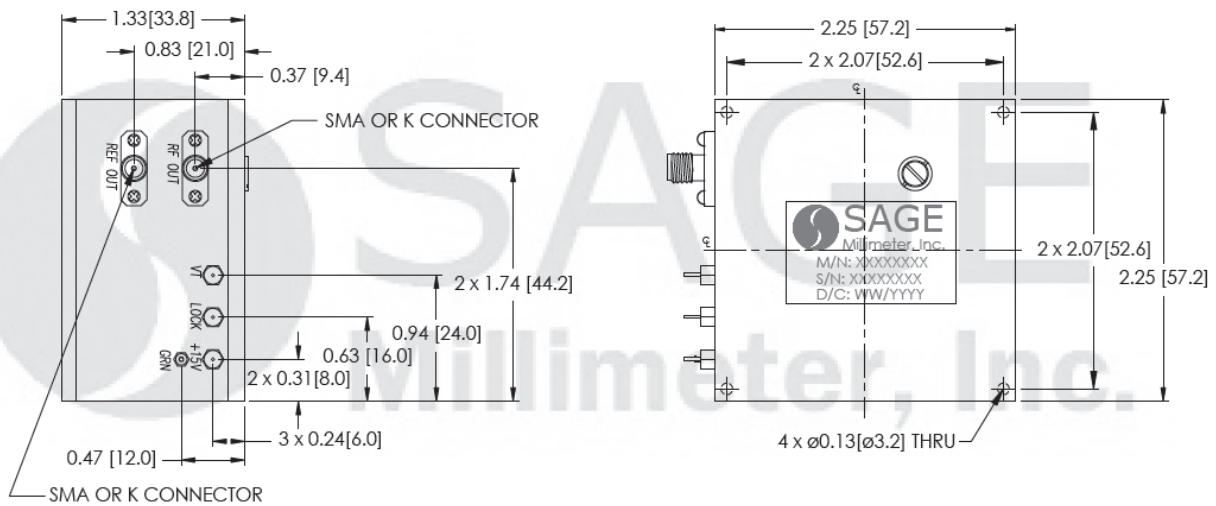


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Typical Spectrum Display



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



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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.**

