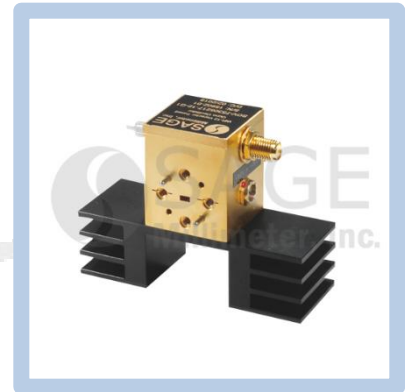




## W-Band Varactor Tuned Gunn Oscillator, 92 GHz, $\pm 0.25$ GHz Bandwidth

### Description:

**Model SOV-92305216-10-G1** is a W-Band, Varactor tuned Gunn oscillator that utilizes a high performance GaAs Gunn diode and proprietary cavity design to deliver +16 dBm typical power. The oscillator features a Varactor tuning range of  $\pm 250$  MHz and delivers low AM/FM noise and harmonic emissions. Compared to its counterparts, such as multiplier based sources, the Gunn oscillator is a lower cost and cleaner source. The center frequency of the oscillator can be mechanically trimmed within  $\pm 250$  MHz using the self-locking set screw. The performance of the oscillator can be further enhanced by adding an isolator, Gunn oscillator modulator/regulator and temperature heater.



### Features:

- Low AM/FM Noise and Harmonics
- Mechanical Frequency Trimming

### Applications:

- Test Sources
- Signal Generation
- FMCW Radar Systems
- Communication Systems

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Center Frequency	91.75 GHz	92.00 GHz	92.25 GHz
Power Output	+15 dBm	+16 dBm	
Mechanical Tuning Range		$\pm 250$ MHz	
Varactor Tuning Range		$\pm 250$ MHz	
Bias Voltage		+4.5 V <sub>DC</sub>	+5.0 V <sub>DC</sub>
Bias Current		750 mA	
Varactor Tuning Voltage Range	0 V <sub>DC</sub>		+25 V <sub>DC</sub>
Specification Temperature		+25 °C	
Operating Temperature	+0 °C		+50 °C

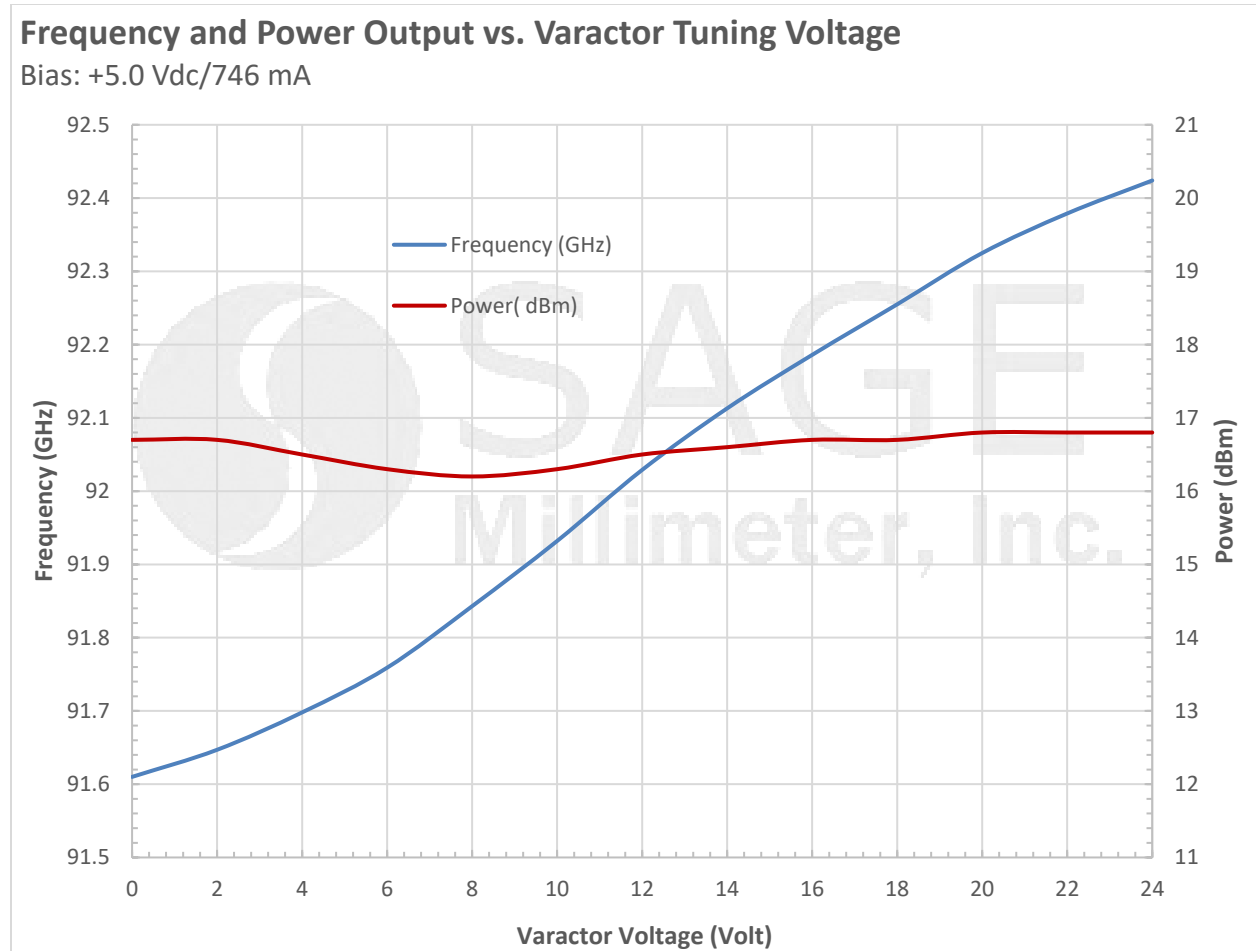
### Mechanical Specifications:

Item	Specification
RF Port	WR-10 Waveguide with UG-387/U-M Flange
Bias Port	Soldered Pins
Tuning Port	SMA (F)
Mechanical Trimming Mechanism	Self-Locking Set Screw
Housing Material	Aluminum
Finish	Gold Plated
Weight	3.0 Oz
Outline	OV-SVEW





## W-Band Varactor Tuned Gunn Oscillator, 92 GHz, $\pm 0.25$ GHz Bandwidth



### Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)

