SOL-35310215-28-G1

Ka-Band Volume Production Oscillator

SOL-35310215-28-G1 is a volume-production ready, Ka Band Gunn oscillator that utilizes a high performance GaAs Gunn diode and high Q cavity to achieve excellent phase noise and power stability. The oscillator is designed for fixed frequency applications; however, the frequency can be adjusted by ±1 GHz using the self-locking set screw provided.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range		35 GHz	
Power Output	+12 dBm	+15 dBm	
Mechanical Tuning Range	±500 MHz	±1,000 MHz	
Harmonic Emissions		-20 dBc	
Phase Noise @ 100 KHz offset		-95 dBc/Hz	
Frequency Stability			-0.3 MHz/°C
Power Output Stability			-0.03 dB/°C
Bias Voltage		+5.5 V_{DC}	+6 V_{DC}
Bias Current		300 mA	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-28 Waveguide with UG-599/U Flange
Cavity Material	Aluminum
Finish	Chem Film
Weight	0.6 Oz
Outline	OL-A1

ECCN

EAR99

FEATURES

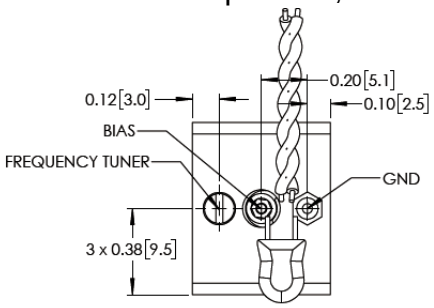
- Low Cost and Production Ready
- Mechanical Tuning Ability
- Low AM/FM Noise and Harmonics
- High Frequency and Power Stability

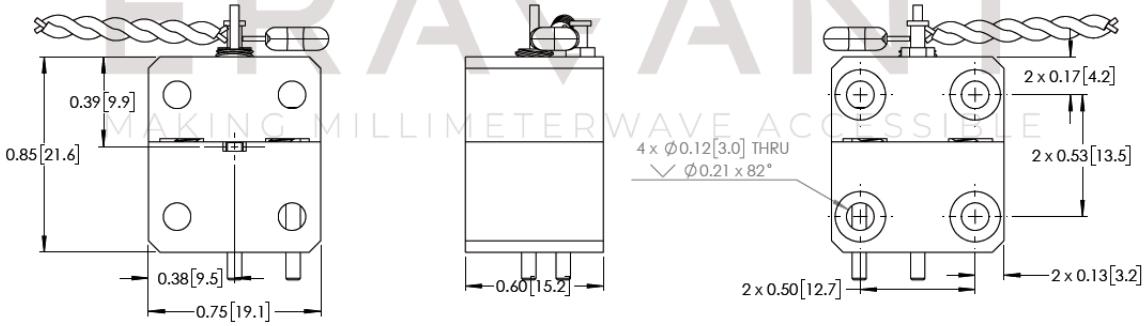
APPLICATIONS

- Traffic Control Systems
- Communication Systems
- Radar System

SUPPLEMENTAL DETAILS

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





NOTE:

- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Reversing polarity bias will destroy the device
- Exceeding absolute maximum rating shown will damage the device
- The device is static sensitive. Always follow ESD rules when working with the device
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- The case temperature of the device shall never exceed +85 ˚C. Use an additional heatsink or fan if necessary.