



### Features and Benefits

- Frequency 100.000000 MHz
- +7 dBm min. ultra low noise sine wave output
- +/- 100.0 ppb max. from -30°C to +70°C
- +/- 1 ppm adjust min. from -0.0V to 10.0V
- 125 dBc/Hz or BETTER @ 100 Hz offset
- 155 dBc/Hz or BETTER @ 1000 Hz offset

### Typical Applications

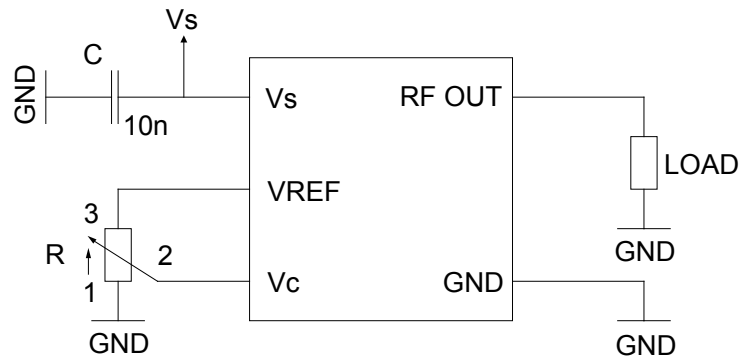
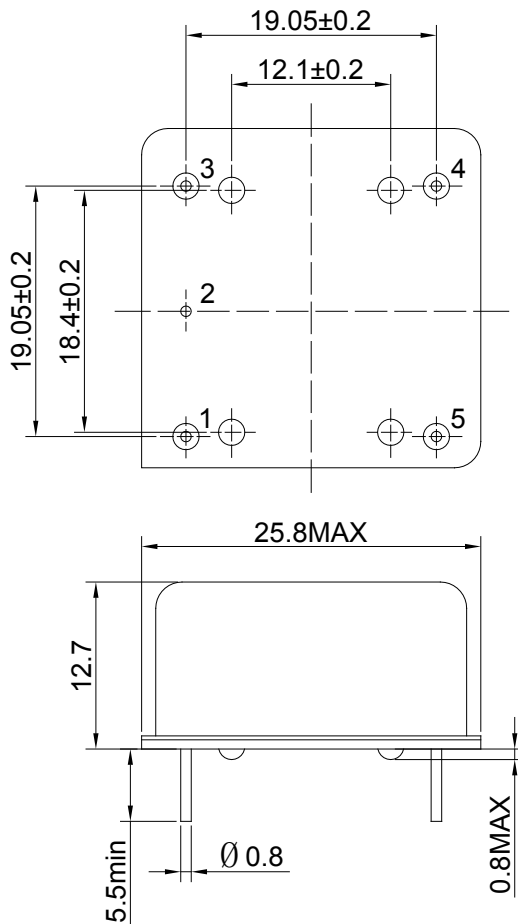
- Ref. for microwave comm. System
- Signal Analyzer Reference for internal synthesizers
- SATCOM Systems

### Description

The OCXO2525L-100MHz-B-V family offers a specially designed vibration isolated package with a 100 MHz SC-cut crystal impedance matched to the oscillator and amplifier circuits to deliver consistent world class phase noise on all production shipments.

### Mechanical Drawing & Pin Connections

Drawing No:MD150074-1



Pin connections

	A	B	C
1	PIN #	Symbol	Function
2	1	RF OUT	RF Output
3	2	GND	Ground
4	3	Vc	Control Voltage(EFC)
5	4	VREF	Reference Voltage
6	5	Vs	Supply Voltage

Unit = mm



Specifications

OCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F <sub>0</sub>			100.000		MHz	
<b>RF Output</b>							
Signal waveform	L		Sine wave				
Load	RL	+/-5%		50		Ohm	
Output Level			+7			dBm	
Harmonics					-30	dBc	
Sub-harmonics					-90	dBc	
Reference voltage VREF output				10.0		V	
<b>Power Supply</b>							
Voltage	Vs		11.4	12.0	12.6	V	
Power Consumption		Steady-state@+25°C			150	mA	
		Warm-up			350	mA	
Warm-up Time		To Δf/f < +/-0.1ppm, at 25°C Ref. to frequency after 15min.		3	5	min	
<b>Frequency Control</b>							
Electronic Frequency Control (EFC)			+/-1			ppm	
EFC Control Voltage	Vc		0	5.0	10.0	V	
EFC slope (Δf/ΔVc)			positive				
EFC input impedance			100			KOhm	
<b>Frequency Stability</b>							
Initial tolerance @ +25°C				+/-100	+/-300	ppb	
Vs. Operating Temperature Range		Steady state			+/-50	ppb	Ref 25°C
Vs. Supply Voltage Change		Vs +/-5%			+/-10	ppb	
Vs. load change (pulling)		RL +/-5%			+/-5	ppb	
G -sensitivity				0.5	1	ppb/G	
Aging	Per Day	After 30 days of operation			+/-2	ppb	
	Per Year				+/-100	+/-200	ppb
<b>Phase Noise</b>							
Phase Noise		@10Hz			-95	dBc/Hz	
		@100Hz			-125		
		@1 KHz			-155		
		@10 KHz			-160		
		@100 KHz			-165		
<b>Environmental</b>							
Operating Temperature Range			-30°C to +70°C				