



### Features and Benefits

Frequency range: 100MHz  
Supply voltage: 3.3V  
Steady current: 455mA Typ.  
Output waveform: Sinewave  
Frequency stability vs. operating temperature: ±50PPB  
Aging: ±100PPB per year  
Phase noise@100KHz: -170dBc/Hz  
Operating temperature: -40C to +85C  
Size: 25.4x25.4x19.0mm

### Typical Applications

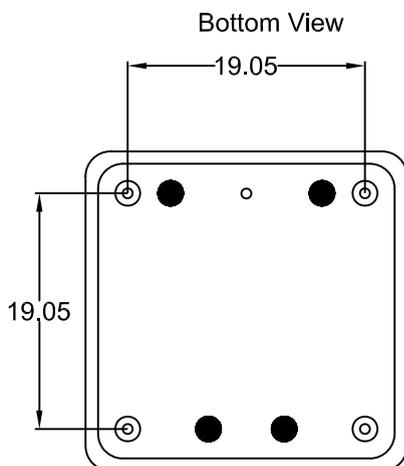
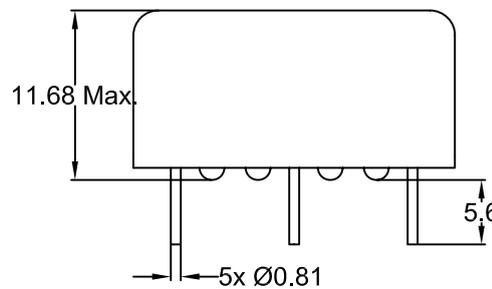
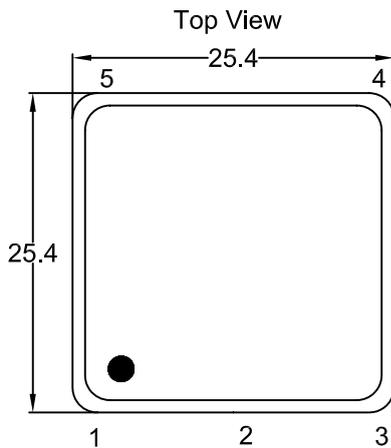
Cellular Base Stations  
Instrumentation  
Microwave Applications  
Radar reference

### Description

The OCXO2526AXLN-100MHz-A-V are designed for applications where exceptional frequency stability and timing is required. It has both excellent temperature performance and long-term stability. These characteristics make it an excellent choice for timing applications.

### Mechanical Drawing & Pin Connections

Drawing No: MD200004-3



Pin	Function
1	Output
2	GND
3	Control Voltage/N.C.
4	Reference Voltage/N.C.
5	Supply Voltage

Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F <sub>nom</sub>			100		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Level			+10		+16	dBm	
Load			47.5	50	52.5	ohm	
Harmonics					-30	dBc	
Spurious					-80	dBc	
<b>Power Supply</b>							
Supply Voltage				3.3		V	
Warm-up Time	T <sub>up</sub>	To initial tolerance			5	min	
Power Consumption		Steady state		1.5		W	
		Warm-up			5.2	W	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control (EFC)				±0.5		ppm	
EFC voltage			0		3.3	V	
Input Impedance				100		k Ω	
Linearity				10		%	
EFC Slope			positive				
<b>Frequency Stability</b>							
Versus Operating Temperature Range		ref. 25°C			±50	ppb	
Initial Tolerance		+25°C±1°C			±0.25	ppm	
Versus supply voltage	V <sub>s</sub>	±5% change		±5.0		ppb	
Versus load		±5% change		±5.0		ppb	
Acceleration Sensitivity		Vibration profile: 0.001G <sup>2</sup> /Hz 10Hz to 2kHz		1.0		ppb/G	
Aging Per Day		after 30 days of operation			±1.0	ppb	
Aging 1 <sup>st</sup> Year						±100	ppb
Allan Variance		1s		5		e-12	
SSB Phase noise (100MHz)		10Hz		-95		dBc/Hz	
		100Hz		-125		dBc/Hz	
		1kHz		-145		dBc/Hz	
		10kHz		-153		dBc/Hz	
		100kHz		-170		dBc/Hz	
<b>Environmental, Mechanical Conditions</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +100°C						
Shock	MIL-STD-202G Method 213 Test Condition C						
Seal	MIL-STD-202 Method 112 Test Condition D						
Random Vibration	MIL-STD-810G Method 514 Test Procedure I						
Sinusoidal Vibration	MIL-STD-202G Method 204 Test Condition A						