



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

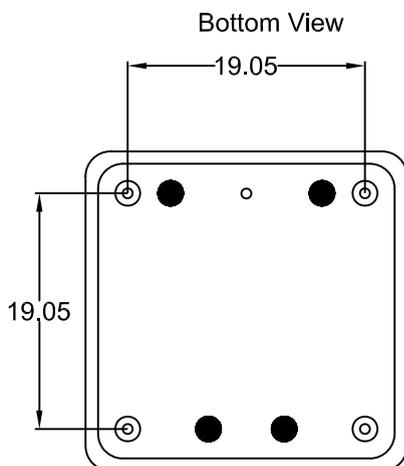
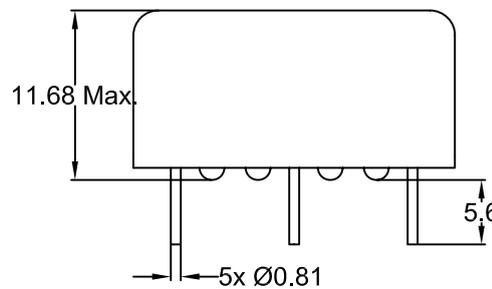
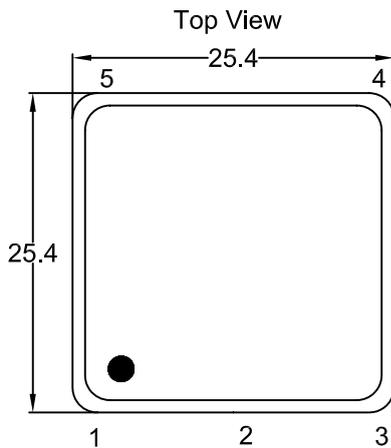
Cellular Base Stations
Instrumentation
Microwave Applications
Radar reference

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 _{nom}			100		MHz	
RF Output							
Signal Waveform			Sinewave				
Level			+10		+16	dBm	
Load			47.5	50	52.5	ohm	
Harmonics					-30	dBc	
Spurious					-80	dBc	
Power Supply							
Supply Voltage				3.3		V	
Warm-up Time	T _{up}	To initial tolerance			5	min	
Power Consumption		Steady state		1.5		W	
		Warm-up			5.2	W	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±0.5			ppm	
EFC voltage			0		3.3	V	
Input Impedance				100		k Ω	
Linearity				10		%	
EFC Slope			positive				
Frequency Stability							
Versus Operating Temperature Range		ref. 25°C			±50	ppb	
Initial Tolerance		+25°C±1°C			±0.25	ppm	
Versus supply voltage	V _s	±5% change		±5.0		ppb	
Versus load		±5% change		±5.0		ppb	
Acceleration Sensitivity		Vibration profile: 0.001G ² /Hz 10Hz to 2kHz		1.0		ppb/G	
Aging Per Day		after 30 days of operation			±1.0	ppb	
Aging 1 st 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	
Environmental, Mechanical Conditions							
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						