



### Features and Benefits

Frequency range: 120MHz  
Supply voltage: 12V  
Power consumption: 1.5W Max.  
Output waveform: Sinewave  
Frequency stability vs. operating temperature: 50ppb  
Aging: ±200ppb per year  
Phase noise@100KHz: -173dBc/Hz  
Operating temperature: -40°C to +85°C  
Size: 25.5x25.5x15mm

### Typical Applications

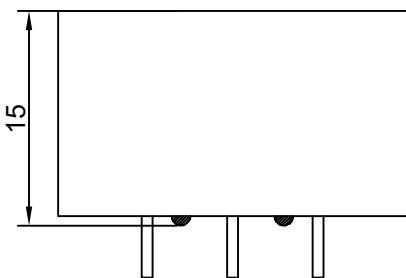
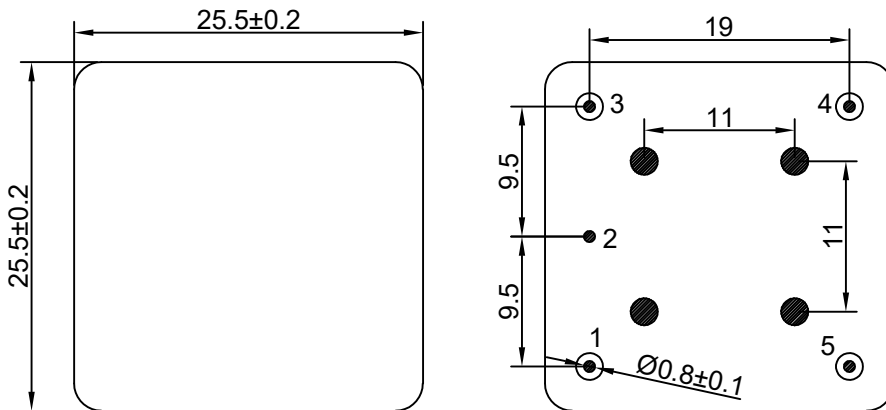
Synthesizer  
Medical Electronics  
Base Station  
Instrument

### Description

OCXO2525CL-LN-120MHz-A-V is designed for applications where exceptional frequency stability and timing is required. It has both excellent temperature performance and short-term stability. These characteristics make it an excellent choice for timing applications.

### Mechanical Drawing & Pin Connections

**Drawing No:** MD240017-1



Pin Connections

Pin	Function
1	Output
2	GND
3	Control Voltage
4	Reference Voltage
5	Supply Voltage

Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			120		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Load	R <sub>L</sub>		50			ohm	
Output Level			+7			dBm	
Harmonics					-40	dBc	
Spurious					-80	dBc	
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>	±5%		12		V	
Warm-up Time	T <sub>up</sub>	@ +25 °C	0		5	min	with accuracy of ±100ppb
Power Consumption					1.5	W	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control (EFC)			±0.5		±2.0	ppm	
EFC voltage	V <sub>c</sub>		0		5	V	
EFC Slope			positive				
<b>Frequency Stability</b>							
Versus Operating Temperature Range		-40°C to +85°C		50		ppb	
Initial Tolerance @+25°C		At shipment, nominal EFC			±300	ppb	
Versus supply voltage		±5% change			±5	ppb	
Versus load		±5% change			±5	ppb	
Short term stability		Test after 15 min			1x10 <sup>-11</sup>	ppb/s	
Long term stability			±0.2			ppm	
Aging Per Day		after 30 days operation			±2	ppb	
Aging 1 <sup>st</sup> Year				±50	±200	ppb	
SSB Phase noise		10Hz			-100	dBc	
		100Hz			-135	dBc	
		1KHz			-160	dBc	
		10KHz			-170	dBc	
		100KHz			-173	dBc	
<b>Environmental, Mechanical Conditions</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +125°C						
Temperature stress test	IEC60068,GJB360B						
Mechanical stress test	IEC60068,GJB360B						
EMC test(ESD)	IEC61000,JESD22						
Solderability	EIA/JESD22-B102-C						
RoHS	RoHS directive 2011/65/EU Annex II Recasting 2002/95/EC						