Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
TEL: 1-281-870-8822 EMAIL:Sales@DynamicEng.com

OCXO2525AG-10MHz-A-V
Low phase-noise high stability OCXO

Features and Benefits

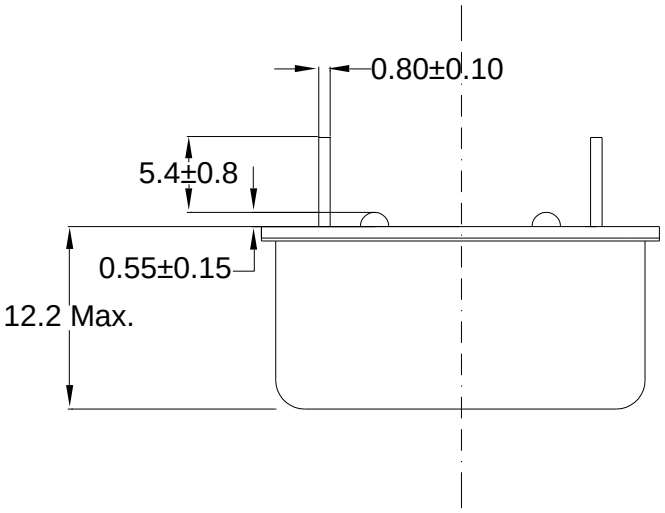
10MHz sine wave output
5V supply, 300mA steady state current
Less than -150dBc/Hz @10KHz

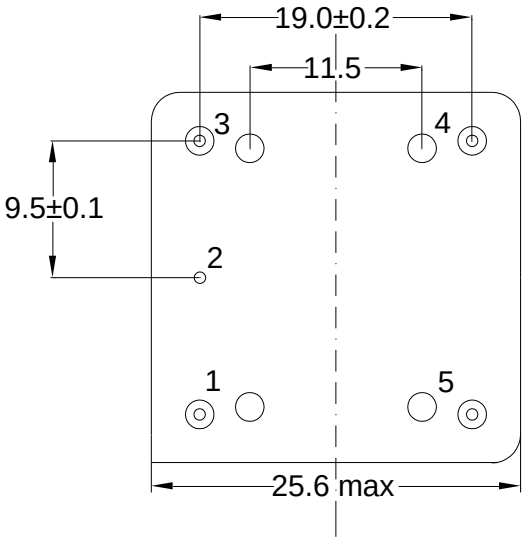
Typical Applications

Stratum 3E clock systems
Cellular Base Station
Microwave Applications

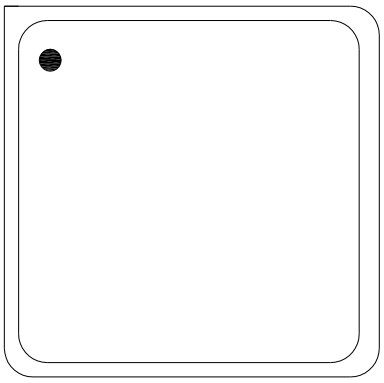
Mechanical Drawing & Pin Connections

Drawing No:MD160107-1





Pin	Function
1	Output
2	GND
3	VC
4	N.C.
5	VS



Unit: mm
1mm=0.0394inch

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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F_{nom}			10		MHz	
Initial Tolerance		Vc=2.0V/@25°C after 30mins power on ref to nominal frequency			±200	ppb	
RF Output							
Output Wave Form :				Sine wave			
Load	R_L			50		Ohm	
Output level			5	7	9	dBm	
Harmonics					-30	dBc	
Spurious					-70	dBc	
Warm-up time		@+25°C,Within ±100PPb of final frequency with reference after 1 hour on			5	min	
Power Supply							
Supply Voltage	V_s		4.75	5.0	5.25	V	
Current consumption(Steady state)					300	mA	@ +25°C
Current consumption(Warm-up)					800	mA	
Frequency adjustment range							
Control Voltage			0	2.0	4.0	V	
Tuning Range	V_c	Vc=0V			-1	ppm	
		Vc=2.0V	-200		+200	ppb	
		Vc=4.0	+1.0			ppm	
Slope				positive			
Input impedance			100			kOhm	
Linearity			-10		+10	%	
Frequency Stability							
Vs. Temperature		From -40°C to +85°C Ref to+25°C			±50	ppb	
Vs. Supply Voltage Variation		Vs±5% @25°C			±5	ppb	
Vs. load change		C_L+/-5% @25°C			±5	ppb	Pulling
Aging per day		after 30days of operation			±0.5	ppb	
Aging first year					±100	ppb	
Short Tem Stability		in still air			0.05	ppb/s	after power on 1 hour,@25°C
Phase Noise							
Phase noise		@10 Hz			-120	dBc/Hz	
		@100 Hz			-140		
		@1 KHz			-150		
		@10 KHz			-150		
Environmental							
Operating temperature range	-40°C ~+85°C						
Operable temperature range	-40°C ~+85°C						
Storage temperature range	-40°C ~+85°C						

ESD	HBM.2kV
MSL	MSL1
Drop Test	The test shall be carried out as the provisions of the IEC60028-2-32 test Ed. 10cm height, 3 times on hard board with thickness of 3cm
Bumping Test	Device are bumped to three mutually perpendicular axes at peak acceleration of 400m/s^2, each 4000±10 times, 6ms pulse duration time.
Vibration test	Frequency range: 1Hz-4Hz-100Hz-200Hz Acceleration: 0.0001g^2/Hz-0.01g^2/Hz-0.01g^2/Hz-0.001g^2/Hz Grms=1.15g Sweep time: 30 minutes (perpendicular axes each sweep time)
Mechanical Shock	100g, 6mS duration, 1/2 sine wave, 3 shocks each direction along 3 mutually perpendicular planes.
Thermal shock	0.5h@-40°C，0.5h@+85°C，Note: the changing time < 30 seconds, cycling for 100 times