



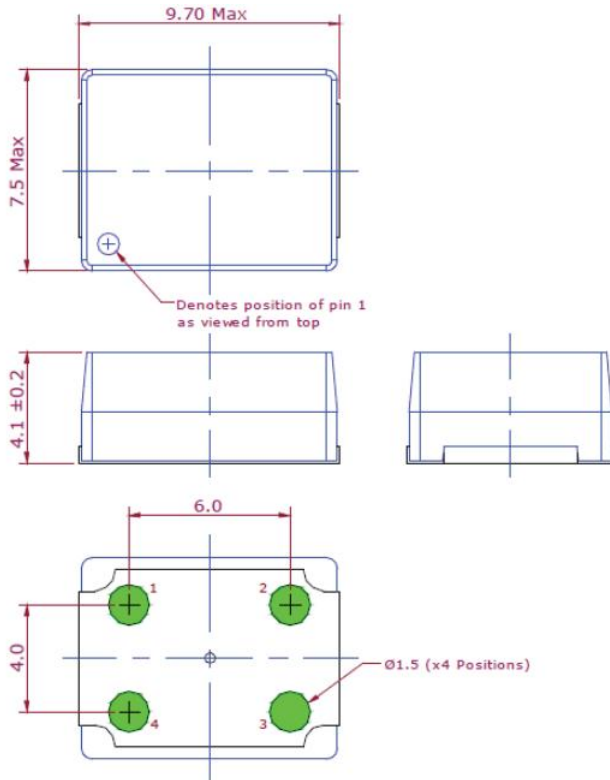
Oven Controlled Crystal Oscillator

Specifications:

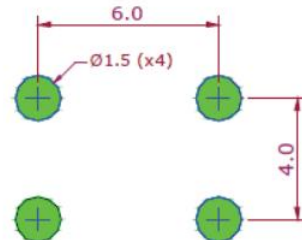
Parameter		Value			unit	conditions
		Min.	Typ.	Max.		
Frequency Range		0.032768	10	40	MHz	
Supply Voltage			3.3		V	
			5.0		V	
Power Consumption				1.5	W	During Warming-up
				0.5	W	Steady at +25℃ & still air
Initial Frequency Tolerance				±500	ppb	At shipment, nominal EFC, +25℃
Freq. Stability		±20		±50	ppb	-20℃ ~ +70℃
		±50		±100	ppb	-40℃ ~ +70℃
		±50		±100	ppb	-40℃ ~ +85℃
				±200	ppb	-55℃ ~ +85℃
Sine	Output Level	-----	-----	-----	dBm	
	Harmonious	-----	-----	-----	dBc	
	Spurious	-----	-----	-----	dBc	
	Load	-----	-----	-----	Ω	
LVTTL	VOH	2.4			V	LVTTL Output, Load=15pF
	VOL			0.4	V	LVTTL Output, Load=15pF
	Duty Cycle	45		55	%	(VOH- VOL)/2
	Rise/Fall edge			6	nS	LVTTL Output, Load=15pF
	Load		15		pF	
Supply Sensitivity				±10	ppb	Vcc±5%
Load Sensitivity				±10	ppb	Load±5%
Aging per Day				±2	ppb	After 30 days of operation
Aging per year				±200	ppb	After 30 days of operation
Control Voltage Range		-----	-----	-----	-----	
		-----	-----	-----	-----	
Frequency Turning Range		-----	-----	-----	-----	
Tuning Slope		-----				
SSB Phase Noise @ 10MHz		-95			dBc/Hz	Offset 10Hz
		-120				Offset 100Hz
		-150				Offset 1kHz
		-155				Offset 10kHz
		-160				Offset 100kHz
Operating Temperature Range		-55℃~+85℃		Storage Temperature Range		-55℃~+125℃

Outline Dimension & Pin Connections

Unit : mm



Recommended Land Pattern



Pin	Function
1	NC
2	Ground
3	RF-output
4	Supply Voltage

Note: For correct operation, decouple the supply voltage with a 10μF capacitor close to the oscillator.

HDE OC 2012 L M G N 05 S - **.*****

Company abbreviation

Production: OCXO

Outline: 20*12.8

Working Temp.

E: -20℃~+70℃

F: -30℃~+80℃

G: -40℃~+85℃

Stability

K: ±100ppb

L: ±50ppb

M: ±10ppb

N: ±5ppb

Tuning

N: No Tuning

I: ±1ppm

J: ±0.5ppm

Phase Noise

E: -130dBc/Hz@1kHz

F: -140dBc/Hz@1kHz

G: -145dBc/Hz@1kHz

H: -150dBc/Hz@1kHz

Frequency in MHz

Out Wave: H:LVTTTL; S:Sine wave

Supply Voltage: 12:12V; 05:5.0V; 03:0.3V