

# Dynamic Engineers Inc.

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

### **Features and Benefits**

5MHz--52MHz Frequency range 3.3V and 5.0V Supply voltage CMOS and Clipped Sinewave Output waveform ±0.28ppm Stability Vs -40C -- +85C 7.0x5.0mm Size 5, 6.4, 8, 8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 25MHz for CMOS 8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 25MHz for Clipped Sinewave

# **Typical Applications**

Femtocell, Base Stations WLAN / WiMAX / WiFi, Wireless Communications Mobile Phone

## **Mechanical Drawing & Pin Connections**

### Drawing No:

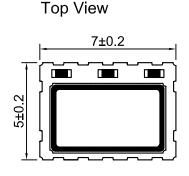
H7 LC+) \$%GSgYf]Yg

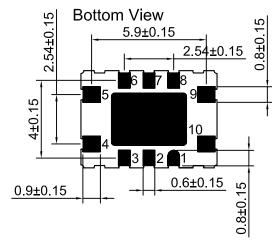
SMD High Precision Voltage Controlled TCXO

7.0 x 5.0 mm

MD15001) -%

**Pin Function** 

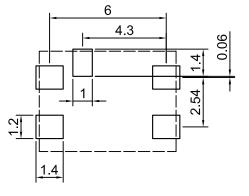




#### #1 NC #2 NC NC #3 #4 GND Output #5 #6 NC #7 NC #8 **Tri-State Control** #9 VDD #10 VCON

# Side View

### Recommended Soldering Pattern



Unit in mm 1mm = 0.0394 inches

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Rev.1

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### H7 LC+) \$%GSgYf]Yg 7.0 x 5.0 mm SMD High Precision Voltage Controlled TCXO

# **Specifications**

Creation	Conditon	5.0V		3.3V		11mit	
Specification		Min.	Max.	Min.	Max.	Unit	
Supply Voltage Variation(VDD)	Vdd±5%	4.75	5.25	3.135	3.465	V	
Frequency Range		5	52	5	52	MHz	
Standard Frequency	For CMOS For Clipped Sinewave	5, 6.4, 8, 8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 25 8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 25				MHz	
Frequency Tolerance		±2.0 ±2.0			ppm		
Frequency Stability			12.0		12.0	ppin	
Vs Supply Voltage	±5% Change		±0.5		±0.5	ppm	
Vs Load	±10% Change		±0.2		±0.2	ppm	
Vs Aging			±1.0		±1.0	ppm	
Supply Current	CMOS Clipped Sinewave	-	6 3.5	-	6 3.5	mA	
	Output High	90%V DD	-	90%V DD	-	V	
Output Level(CMOS)	Output Low	-	10%VDD	-	10%VDD		
	Duty	45	55	45	55	%	
Output Level(Clipped Sinewave)		0.8		0.8		Vp-p	
Load(CMOS)		15		15		pF	
Load(Clipped Sinewave)		10kohm//10pf 10kohm//10pf		hm//10pf			
Control Voltage Range(VCTCXO)		0.5	2.5	0.5	2.5	V	
Pulling Range(VCTCXO)		±5	±12	±5	±12	ppm	
Vc Input Impedance(VCTCXO)		100		100		kohm	
Phase Noise@19.2MHz							
100Hz		-120		-120		dBc/Hz	
1KHz		-140		-140			
10KHz		-148		-148			
Start Time		-	2	-	2	mSec	
Tri-State	Enable	3.5	-	2.31	-	V	
	Disable	-	1.5	-	0.99	-	
Storage Temperature		-55	-125	-55	-125	°C	

# Frequency Stability vs. Temperature

	±0.05PPM	±0.1PPM	±0.14PPM	±0.28PPM	±0.37PPM	±0.5PPM
-10°C to +60°C	Available	Available	Available	Available	Available	Available
-20°C to +70°C	Conditional	Available	Available	Available	Available	Available
-40°C to +85°C	Not Available	Not Available	Not Available	Available	Available	Available

Note: not all combination of options are available. Other specifications may be available upon request.

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