



# Dynamic Engineers Inc.

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

**TCXO7500T-25.600MHz-A**  
Next Generation Compensation IC Technology

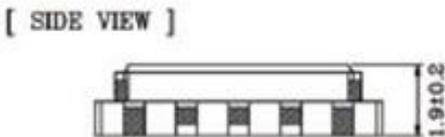
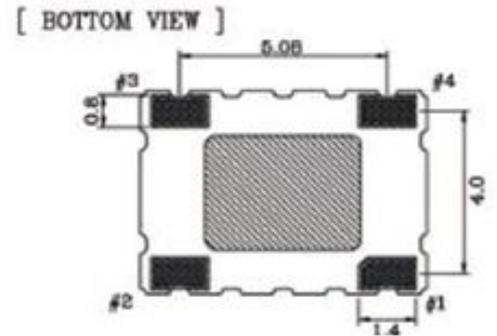
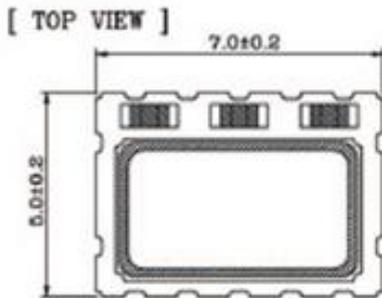
## Features and Benefits

- Better than  $\pm 300$  ppb from  $-40^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$
- 25.600 MHz low noise cmos output
- 3.3V supply; 6.0 mA max.
- Typ. -140 dBc/Hz @ 1 KHz offset
- Typ. -148 dBc/Hz @ 10 KHz offset
- $\pm 5$  ppm min. pull

## Typical Applications

- Mobile SATCOM
- Mobile Radio
- Harsh Environments
- Femto-cell

## Mechanical Drawing



PIN	FUNCTION
#1	Vcon VC-TCXO GND TCXO
#2	GND
#3	OUTPUT
#4	VDD



## Specifications

TCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Ty	Max.		
Operational Frequency Range	$f_0$			25.600000		MHz	
LVC MOS output		Load Capacitance		15		pF	
Square wave		Duty Cycle	45		55	%	
		Output Logic 1	0.9*Vcc			V	
		Output Logic 0			0.1*Vcc	V	
<b>Power Supply</b>							
Voltage	V <sub>CC</sub>		3.150	3.300	3.450	V	
Current Consumption					6.0	mA	
<b>Frequency versus Voltage</b>							
+/- 5 ppm minimum							
Pin 1: Control Voltage :		Will work 0V to 3.3V	0.5	1.5	2.5	V	
<b>Frequency Stability</b>							
Vs. Temperature		-40°C to +75°C			+/-0.300	ppm	With respect to Nominal Frequency
Vs. at 25°C		Initial Accuracy at time of shipment			TBD	ppm	
Vs. Reflow Shift		After 24 hours settling time			TBD	ppm	
<b>Aging</b>							
		After 30 Days of Operation			+/- 0.16	ppm	In the first year
					+/- 0.80	ppm	Over 5 years
<b>SSB Phase Noise</b>							
@ 25.600 MHz		100 Hz		-125		dBc/Hz	
		1 KHz		-140			
		10 KHz		-148			
		100 KHz		-148			