

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

Frequency range: 10MHz Supply voltage: 3.3V Steady current: 8.0mA Max Output waveform: CMOS Frequency stability vs. operating temperature: ±0.5PPM Phase noise@10KHz: -154dBc/Hz Operating temperature: -40°C to +85°C Size: 7.0x5.3x1.5mm

Typical Applications

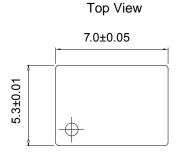
Guidance Avionics Precision GNSS/Positioning Real Time Kinematic (RTK)

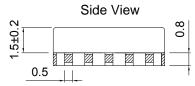
Description

TCXO7500BM-LG-10MHz-A-V is the Ultra-Low G Sensitivity TCXO. The frequency stability can be less than ± 0.5 PPM. It can be widely used in the portable communication devise.

Mechanical Drawing & Pin Connections

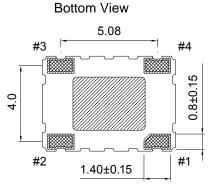
Drawing No: A 8 &&\$\$' %%



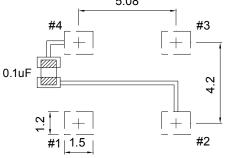


Pin#	Function						
1	Vcon:VC-TCXO NC/GND:TCXO						
2	GND						
3	OUTPUT						
4	Vcc						

Unit in mm 1mm = 0.0394 inches



Recommended Soldering Pattern 5.08



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1uF as close to the part as possible between Vcc and GND PAD

Dynamic Engineers, Inc.

Rev. 1

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside, such as data tables and araphs without notification to potential customers who may have earlier revisions in their possession.



Dynamic Engineers Inc."

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

Specifications

Oscillator	Sym	Condition	Value			Unit	Note
Specification			Min.	Тур.	Max.		
Operational Frequency	f ₀			10		MHz	
RF Output							
Output Waveform				CMOS			
Load				15		pF	
Output Level High			0.9*V _{cc}			V	
Output Level Low					0.1*V _{cc}	V	
Duty Cycle			45		55	%	
Start Time					5	ms	
Power Supply							
Voltage	V _{cc}	±5%		3.3		V	
Current					8.0	mA	
Frequency Stability	1				1		1
Versus Temperature					±0.5	ppm	
Versus Supply Voltage		±10%			±0.1	ppm	
Versus Load		±10%			±0.05	ppm	
Aging @ first year					±1.0	ppm	
Frequency Tolerance		Frequency at 25°C, 1 hour after reflow			±2.0	ppm	
G Sensitivity		Gamma Vector, 3-axes			0.3	ppb/g	
		@10Hz		-107		dBc/Hz	
Phase Noise		@100Hz		-135			
		@1KHz		-149			
		@10KHz		-154			
Environmental Conditio	ns 🔄						
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +125 °C					