



### Features and Benefits

- Frequency range: 37.4MHz
- Supply voltage: 3.3V
- Steady current: 15mA Max
- Output waveform: LVCMOS
- Frequency stability vs. operating temperature: ±0.5ppm
- Aging: ±1.0ppm per year
- Phase noise@1KHz: -130dBc/Hz
- Operating temperature: -20°C to +70°C
- Size: 7.0x5.0x1.9mm

### Typical Applications

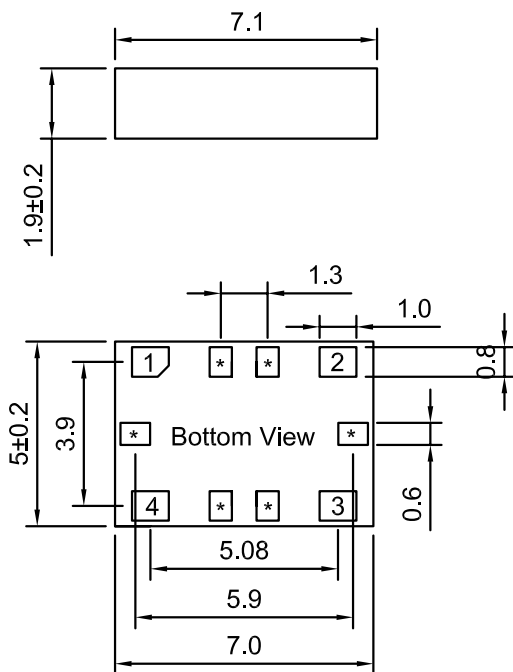
- Base Stations
- Instrumentations
- Synthesizer
- SDH/SONET
- Medical Electronics

### Description

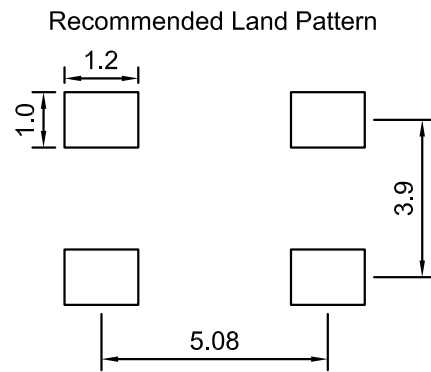
TCXO7500CL-37.4MHz-A offers wide temperature operation from -20°C to +70°C with outstanding frequency stability and low phase noise performance.

### Mechanical Drawing & Pin Connections

Drawing No: A 8 8%\$\$8%4%



- \*Note:
1. The pins with "\*" are for factory test.
  2. Leave pin1 unconnected if Vcon is not used



PIN	FUNCTION
#1	Control voltage
#2	GND
#3	RF output
#4	Supply voltage

Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			37.4		MHz	
Output			LVCMOS				
Output Level				V <sub>OH</sub> ≥ 2.4 V <sub>OL</sub> ≤ 0.4		V	
Output load				15 pF			
Duty Cycle		(V <sub>OH</sub> - V <sub>OL</sub> )/2	45		55	%	
Rise/Fall					6	ns	
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>			3.30		V	
Current Consumption			5		15	mA	
<b>Frequency Stability</b>							
Vs temperature		-20°C to +70°C			±0.5	ppm	
Vs supply voltage changes		±5%			±0.1	ppm	
Initial Tolerance		At shipment, nominal EFC	±0.05		±0.5	ppm	@25°C
First Year Aging					±1.0	ppm	
Phase noise		1 KHz			-130	dBc/Hz	
<b>Environmental Conditions</b>							
Operating temperature range		-20°C to +70°C					
Storage temperature range		-55°C to +125°C					