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

TCXO7500AT
High precision TCXO

Features and Benefits

Frequency range: 10-26MHz
Supply voltage: 1.8V/2.5V/3.3V
Steady current: 1.5-2.5mA Max
Output waveform: Clipped Sinewave
Frequency stability vs. operating temperature: ±2.5ppm
Aging: ±1.0ppm per year
Phase noise@1KHz: -135dBc/Hz
Operating temperature: -30°C to +75°C
Size: 7.0x5.0x1.65mm

Typical Applications

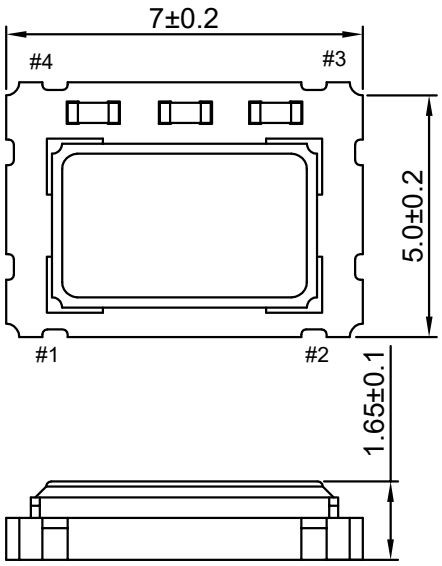
Indoor Positioning System

Description

TCXO7500AT offers wide temperature operation from -30°C to +75°C with outstanding frequency stability and low phase noise performance.

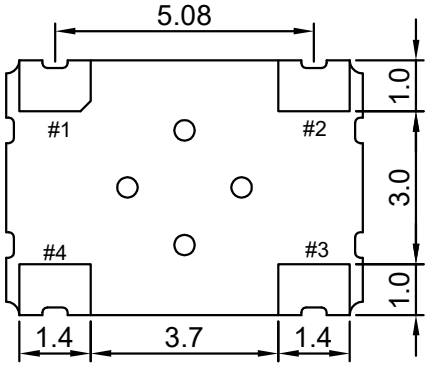
Mechanical Drawing & Pin Connections

Drawing No: MD220039-1

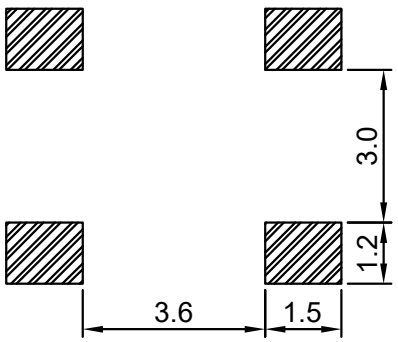


PIN	Function
#1	TCXO: GND VC-TCXO: Vcontrol
#2	GND
#3	Output
#4	Vcc

Unit in mm
1mm = 0.0394 inches



Soldering Pattern



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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F_{nom}		10		26	MHz	
RF Output							
Signal Waveform				Clipped sinewave			
Output Level			0.8			Vp-p	
Output Load				10Kohm//10pF			
Power Supply							
Supply Voltage	Vcc			1.8, 2.5, 3.3		V	
Current Consumption		6MHz-19.99MHz			1.5	mA	
		20MHz-31.99MHz			2.0	mA	
		32MHz-45.00MHz			2.5	mA	
Frequency Adjustment Range							
Absolute Pulling Range (APR)			±8			ppm	
Control Voltage	V_c		0.5	1.5	2.5	V	
Frequency Stability							
Frequency stability vs. temperature					±2.5	ppm	
Frequency stability vs. voltage change					±0.2	ppm	
Frequency stability vs. load change					±0.2	ppm	
Frequency Tolerance		at 25℃			±0.5	ppm	
Aging 1st Year					±1.0	ppm	
Phase Noise		1kHz		-135		dBc	
Environmental,Mechanical Conditions							
Operating temperature range	-30°C to +75°C						
Storage temperature range	-40°C to +85°C						