



Features and Benefits

- Frequency range: 10.23MHz
- Supply voltage: 3.3V
- Steady current: 26mA Typ.
- Output waveform: CMOS
- Frequency stability vs. operating temperature: ± 1.5 ppm
- Aging: ± 2.0 ppm first year
- Operating temperature: -40°C to $+85^{\circ}\text{C}$
- Size: 7.0x5.0x2.5mm

Typical Applications

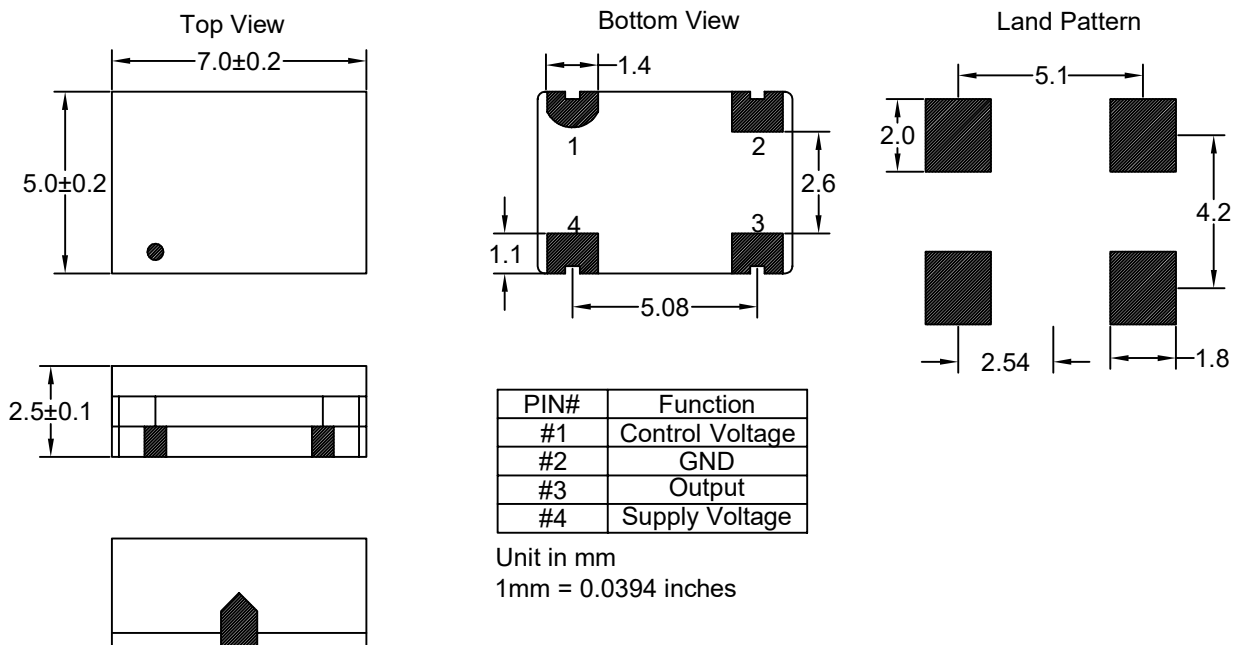
- Frequency reference for real time clocks (RTCs)
- Portable instruments
- Timing synchronization for networks, servers, hubs, routers and switches
- Smart metering, data loggers
- GPS receivers. Telematics

Description

TCXO7500BL-10.23MHz-A-V is the 10.23MHz CMOS output TCXO. The frequency stability can less than ± 1.5 PPM from -40°C to $+85^{\circ}\text{C}$ operating temperature. It can be widely used in the portable communication device.

Mechanical Drawing & Pin Connections

Drawing No: MD2200%2





Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			10.23		MHz	
RF Output							
Signal Waveform			CMOS				
Load				15		pF	
H-Level Voltage	V _H		90%V _{cc}				
L- Level Voltage	V _L				10%V _{cc}		
Rise and fall time		10% ↔ 90% waveform		1.5	3.0	nS	
Duty Cycle		±5%		50		%	
Startup time					5	ms	
Power Supply							
Supply Voltage	V _{cc}	±5%		3.3		V	
Current consumption				26		mA	
Current with output disabled				18		mA	
Frequency Stability							
Versus Operating Temperature Range		-40°C to +85°C		±1.5		ppm	Ref to +25°C
Versus supply voltage		±5% change			±0.2	ppm	
Versus load		±10% change			±0.2	ppm	
Aging 1 st Year					±2.0	ppm	
Initial calibration tolerance		+25°C±2°C			2.0	ppm	At the shipment
Control Voltage Function on PAD 1							
Control Voltage Range			0.5	1.5	2.5	V	
Frequency Pulling Range			±8			ppm	
Environmental specifications							
Operation temperate			-40°C to +85°C				
Storage temperature			-55°C to +150°C				