



Features and Benefits

- Frequency range: 40MHz
- Supply voltage: 3.3V
- Steady current: 8mA Max
- Output waveform: CMOS
- Frequency stability vs. operating temperature: ± 0.5 ppm
- Aging: ± 1 ppm per year
- Phase noise@1KHz: -125dBc/Hz
- Operating temperature: -30°C to +85°C
- Size: 7.1x5.0x2.2mm

Typical Applications

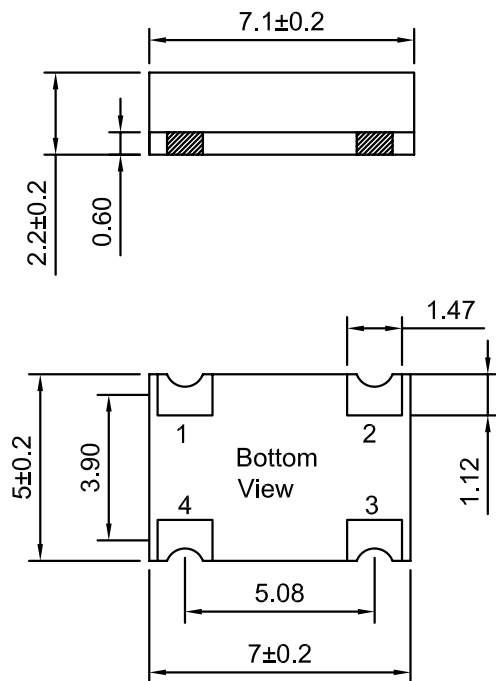
- UHF Synthesizers
- SATCOM System
- Portable Microwave Applications

Description

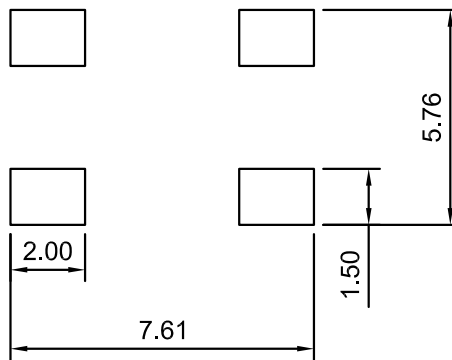
TCXO7500CL-40MHz-A-V offers wide temperature operation from -30°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD210019-1



Recommended Land Pattern



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 _{nom}			40		MHz	
Output			CMOS				
Output Level				V _{OH} ≥ 2.4 V _{OL} ≤ 0.4		V	
Output load			15 pF				
Duty Cycle		@25°C ± 5 °C	45		55	%	
Rise/Fall		@25°C ± 5 °C		6		ns	
Power Supply							
Voltage	V _{cc}			3.30		V	
Current Consumption		@25°C ± 5 °C, Still Air			8	mA	
Control Voltage Range			0.5		2.5	V	
Tuning Frequency Range			±5.0			ppm	
Frequency Stability							
Vs temperature		-30°C to +85°C			±0.5	ppm	
Vs supply voltage changes		±5% @25°C ± 5 °C			±0.2	ppm	
Vs load changes		±5% @25°C ± 5 °C			±0.2	ppm	
Initial Tolerance		At shipment, nominal EFC			±1.0	ppm	
Short term stability		1sec		1.5E-10			
Aging per day		After 30 days of operation			±0.01	ppm	
First Year Aging					±1.0	ppm	
Phase noise		1 KHz			-125	dBc/Hz	@25°C ± 5 °C
Environmental Conditions							
Operating temperature range		-30°C to +85°C					
Storage temperature range		-55°C to +125°C; Off working status					