



Features and Benefits

- Frequency range: 10MHz
- Supply voltage: 3.3V
- Steady current: 45mA Max
- Output waveform: Sinewave
- Frequency stability vs. operating temperature: ±0.28ppm
- Aging: ±1ppm per year
- Phase noise@1KHz: -145dBc/Hz
- Operating temperature: -40°C to +85°C
- Size: 14.6x9.4x6.0mm

Typical Applications

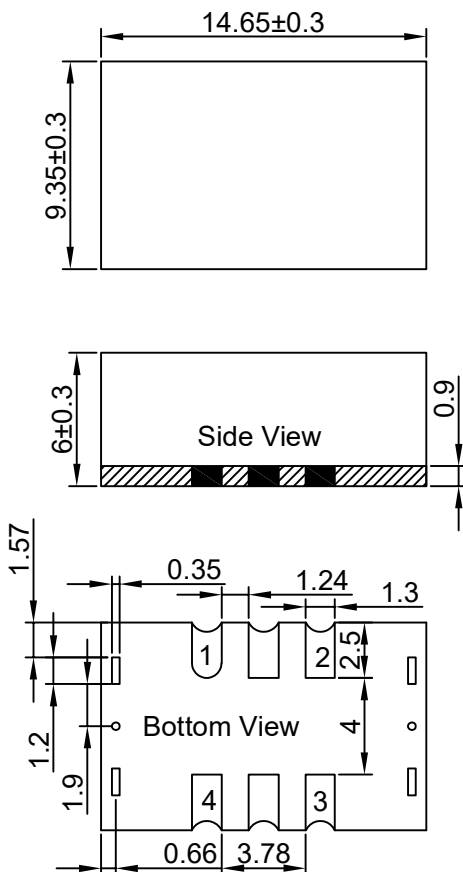
- UHF Synthesizers
- SATCOM System
- Portable Microwave Applications

Description

TCXO1490CL-10MHz-A-V offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: M8 & \$\$' - !%

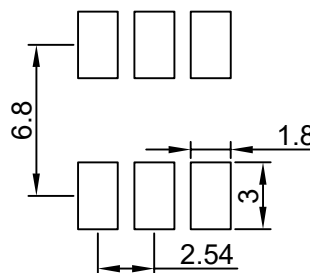


Pin Connections

#1	Control Voltage
#2	GND
#3	Output
#4	Vcc

Unit in mm
1mm = 0.0394 inches

Recommended Land Pattern





Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			10		MHz	
Output			Sinewave				
Output Level		@25°C ± 5 °C	+7			dBm	
Output load			50			Ohm	
Harmonics		@25°C ± 5 °C			-30	dBc	
Spurious		@25°C ± 5 °C			-70	dBc	
Power Supply							
Voltage	V _{cc}			3.3		V	
Current Consumption					45	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±5.0			ppm	
EFC voltage	V _c		0.5	1.5	2.5	V	
Frequency Stability							
Vs temperature		-40°C to +85°C			±0.28	ppm	
Vs supply voltage changes		±5%, @25°C ± 5 °C			±0.1	ppm	
Vs load changes		±5%, @25°C ± 5 °C			±0.2	ppm	
Initial Tolerance		At shipment, nominal EFC @25°C			±1.0	ppm	
First Year Aging		After 30 days of operation			±1.0	ppm	
Phase noise		10Hz			-75	dBc/Hz	@25°C ± 5 °C
		100Hz			-130	dBc/Hz	
		1KHz			-145	dBc/Hz	
		10KHz			-150	dBc/Hz	
		100KHz			-155	dBc/Hz	
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +105°C; Off working status					