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

TCXO1490CL-HS-100MHz-A-V
Low Phase Noise 100MHz TCXO

Features and Benefits

Frequency range: 100MHz
Supply voltage: 3.3V
Steady current: 55mA Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±0.1ppm
Aging: ±1.0ppm per year
Phase noise@1KHz: -130dBc/Hz
Operating temperature: -40°C to +85°C
Size: 14.7x9.4x6.0mm

Typical Applications

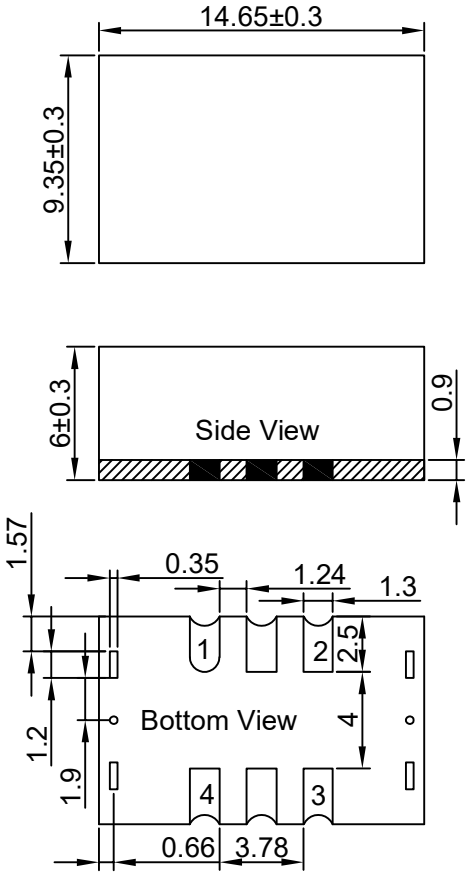
Synthesizer
Base Station
Instrumentations
SDH/SONET

Description

TCXO1490CL-HS-100MHz-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: MD230039-1

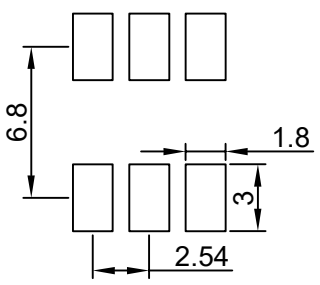


Pin Connections

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

Unit in mm
1mm = 0.0394 inches

Recommended Land Pattern



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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F_{nom}			100		MHz	
Output				Sinewave			
Output Level		@25±5°C	+7			dBm	
Harmonics		@25±5°C			-30	dBc	
Spurious		@25±5°C			-70	dBc	
Output load				50		ohm	
Power Supply							
Voltage	V_{cc}			3.3		V	
Current					55	mA	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±5.0			ppm	
EFC voltage	V_c		0		3	V	
Frequency Stability							
Vs temperature		-40°C to +85°C			±0.1	ppm	
Vs supply voltage changes		±5%, @25±5°C			±0.1	ppm	
Vs load changes		±5%, @25±5°C			±0.2	ppm	
Initial Tolerance		@25±5°C			±0.5	ppm	
First Year Aging		After 30 days operation			±1.0	ppm	
Phase noise		10Hz			-70	dBc/Hz	@25±5°C
		100Hz			-105	dBc/Hz	@25±5°C
		1KHz			-130	dBc/Hz	@25±5°C
		10KHz			-150	dBc/Hz	@25±5°C
		100KHz			-155	dBc/Hz	@25±5°C
Environmental Conditions							
Operating temperature range	-40°C to +85°C						
Storage Temperature	-55°C to +125°C, off working status						