



Features and Benefits

High frequency stability (up to ± 0.5 ppm over -40°C to $+85^{\circ}\text{C}$)
Sinewave Output
SMD Miniature package

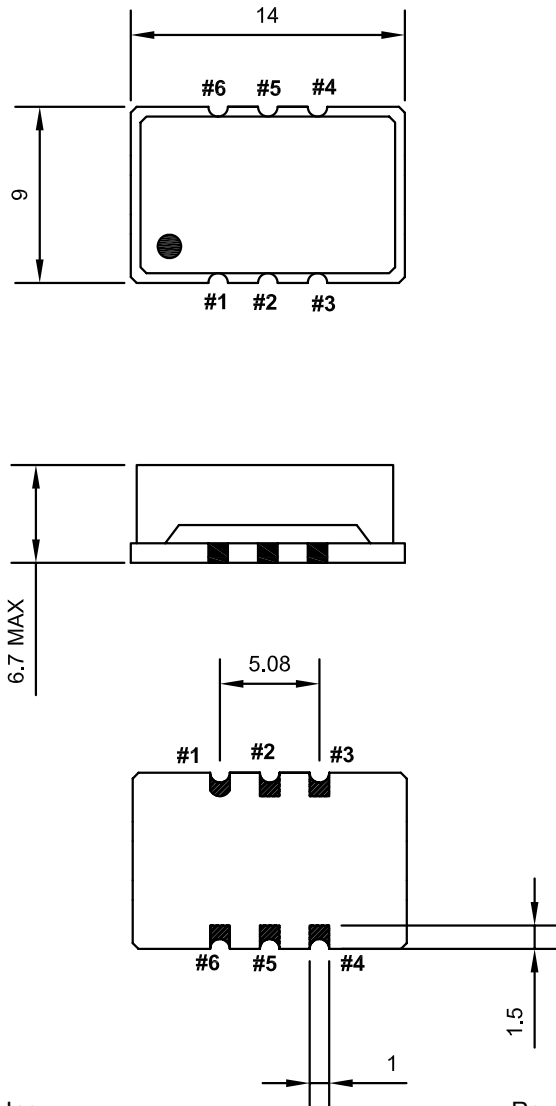
Typical Applications

5G Repeater
Link and micro cells
Low noise microwave

Description

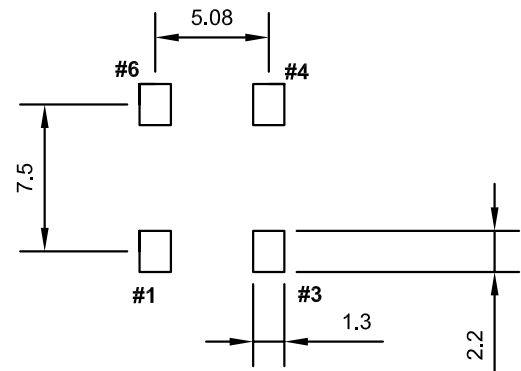
TCXO915BTLG_Sine offers wide temperature operation from -40°C to $+85^{\circ}\text{C}$ with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections



Drawing No: MD190003-1

Solder pattern



PIN Function

#1	Control Voltage for VC-TCXO GND for TCXO
#2	N.C.
#3	GND
#4	RF Output
#5	N.C.
#6	Vcc

unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}		40-200			MHz	
Standard frequencies			50, 60, 70, 72, 80, 100, 120, 125 & 150			MHz	
Output			Sinewave				
Output power			3-6			dBm	
Output load			50			ohm	
Power Supply							
Voltage	V _{cc}			3.30		V	Or 5.0V
Current Consumption					50	mA	
Electronic Frequency Control (EFC)			ΔF > ±5 ppm positive slope				
Control voltage			+1.50 V ±1.0 V +2.50 V ±2.0 V by 5.0 V				
Frequency Stability							
Versus temperature		-40°C to 85°C, ref to (f _{max} +f _{min})/2	-1		+1	ppm	±0.5ppm on request
Tolerance at 25°C			0		+1.0	ppm	
Versus ±5% change in supply voltage		Ref to frequency at nominal supply	-0.05		+0.05	ppm	
Versus ±10% change in load		Ref to frequency at nominal load	-0.05		+0.05	ppm	
Sub harmonics				-80	-60	dBc	
First Year Aging		@40°C	-1.0		+1.0	ppm	
G Sensitivity			0.5 ppb/g per axis, Max. 0.25 ppb/g per axis, Typ on request				
Phase noise (typ.) @100MHz		10 Hz		-78		dBc/Hz	
		100 Hz		-105			
		1 KHz		-127			
		10 KHz		-150			
		100 KHz		-178			
Short-Term Stability	ADEV	Tau = 1 second			1.0	E-10	
Environmental Conditions							
Operating temperature range	-40°C to 85°C						
Storage temperature range	-55°C to 105°C						
Reflow profiles as per IPC/JEDEC J-STD-020C	≤ 245 °C over 10 s max.						