



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

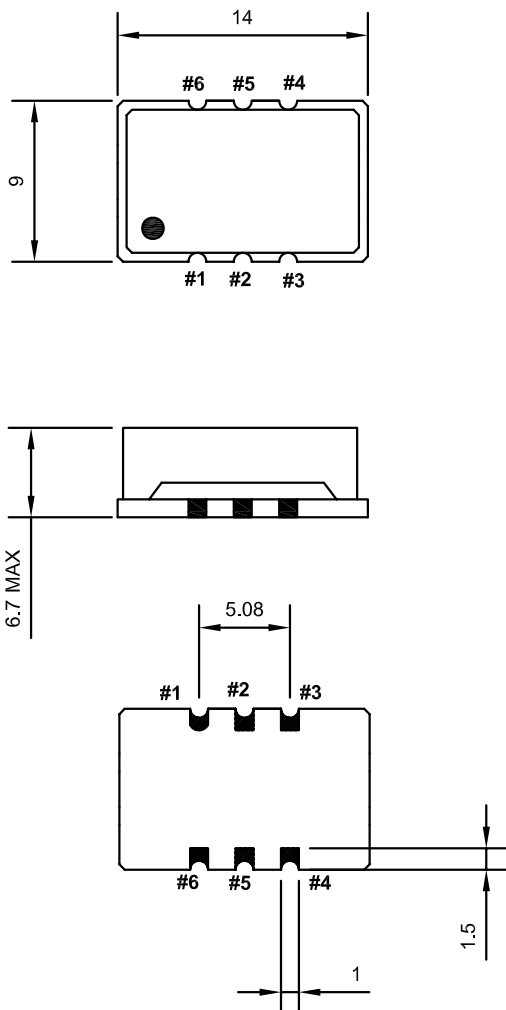
5G Repeater
Link and micro cells
Low noise microwave

Description

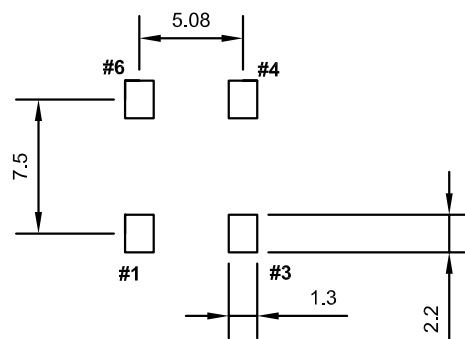
TCXO914BTLG_series offers wide temperature operation from -40°C to $+85^{\circ}\text{C}$ with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD190003-1



Solder pattern



PIN Function

#1	NC or GND
#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}		50,60,70,80,100,120,125,150			MHz	
Sinewave	Output Level		5			dBm	
	Output Load		50			ohm	
Power Supply							
Voltage	V_{cc}		3.30			V	5.0V on request
Current Consumption			30			mA	
Frequency Control*							
Frequency Slope		Over operating temperature	0.05			ppm/°C	
Frequency Stability							
Versus temperature		-40°C to 85°C, ref to (fmax+fmin)/2	-0.5		+0.5	ppm	
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					-60	dBc	
First Year Aging		@40°C	-1.0		+1.0	ppm	
G Sensitivity			0.5 ppb/g per axis, 10 ~ 2'000Hz Max. 0.3 ppb/g per axis, 10 ~ 2'000Hz Typ				
Phase noise (typ.) @100MHz		10Hz		-78		dBc/Hz	
		100 Hz		-105			
		1000 Hz		-127			
		10 KHz		-150			
		100 KHz		-177			
		1000 KHz		-180			
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.						