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

TCXO915BTLG_HCMOS
High stability, Low jitter, Low G Sensitivity (VC)TCXO

Features and Benefits

High frequency stability (up to ±0.5ppm over -40°C to +85°C)
(LV)HCMOS Output
SMD Miniature package

Typical Applications

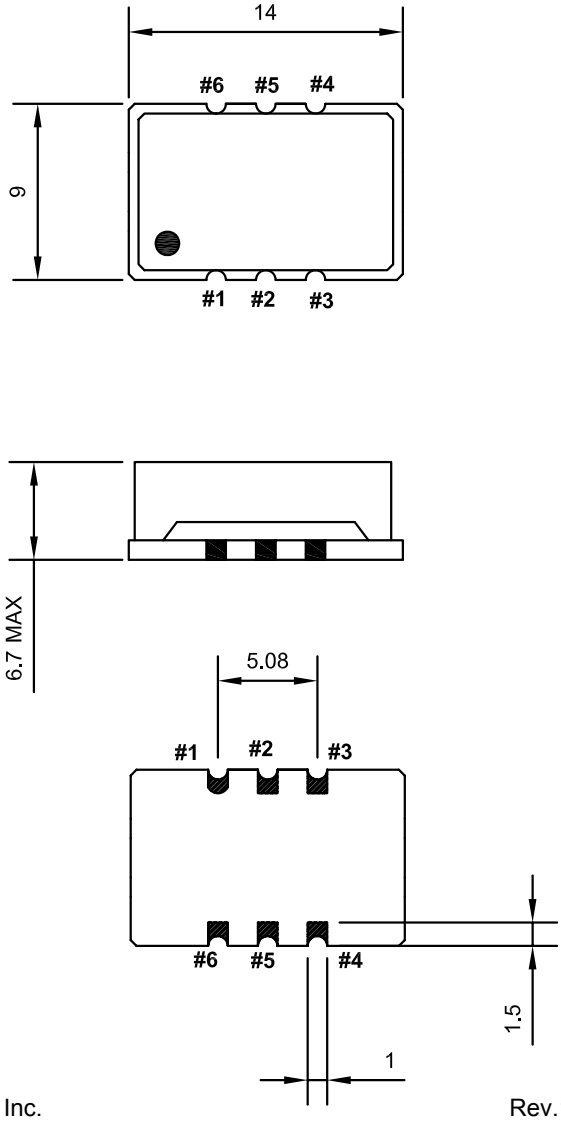
5G Repeater
Link and micro cells
Low noise microwave

Description

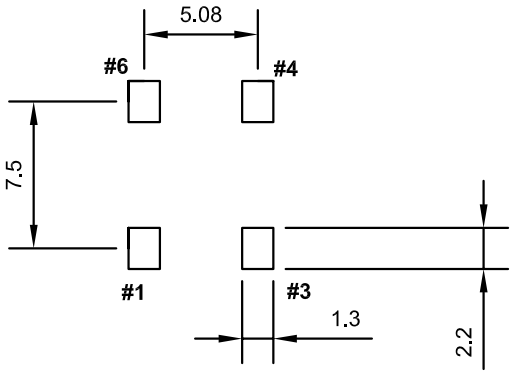
TCXO915BTLG_HCMOS offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: 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

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

Specifications

Oscillator Specification		Sym	Condition	Value Min.	Value Typ.	Value Max.	Unit	Note
Operational Frequency		F_{nom}		40-200			MHz	
Standard frequencies				50, 60, 70, 72, 80, 100, 120, 125 & 150			MHz	
Symmetry				50 % ±5%				
Output load				10 pF Max.				
(LV)HCMOS	VOH			> 0.9 x Vcc				
	VOL			< 0.1 x Vcc				
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 (fmax+fmin)/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.						