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

TCXO914BTLG-125MHz-A-V
Low G Sensitivity, Vibration and Shock resistant, Ultra-low noise floor, Low jitter TCXO

Features and Benefits

Frequency range: 125MHz
Supply voltage: 3.3V
Steady current: 45mA Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±1.0ppm
Aging: ±1.0ppm per year
Phase noise@100KHz: -170dBc/Hz
Operating temperature: -40°C to +85°C
Size: 11.4x9.6x6.5mm

Typical Applications

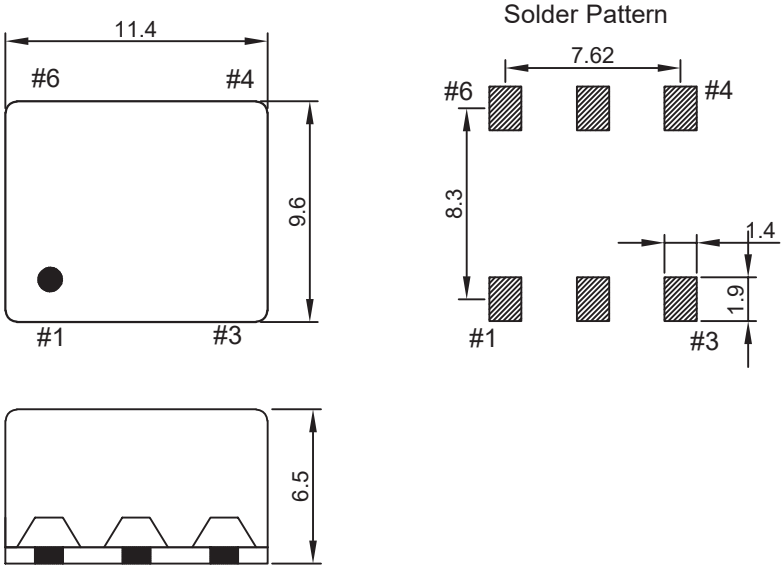
5G Repeater
Link and micro cells
Low noise microwave

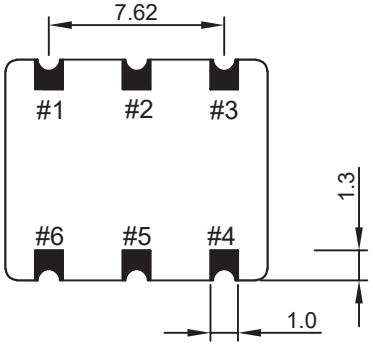
Description

TCXO914BTLG-125MHz-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: MD230026-1





Pin Connection

#1	Control Voltage
#2	N.C.
#3	GND
#4	Output
#5	N.C.
#6	Vcc

Unit in mm
1mm = 0.0394 inches

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Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency		F_{nom}			125		MHz	
Sinewave	Output Level			3		6	dBm	
	Output Load				50		ohm	
Power Supply								
Voltage		V_{cc}			3.30		V	
Current Consumption			Without load			45	mA	
Frequency Control								
Electronic Frequency Control (EFC)				±5.0			ppm	
EFC Voltage				0.5	1.5	2.5	V	
Slope					Positive			
EFC Input Impedance				100			Kohm	
Frequency Stability								
Versus temperature			-40°C to +85°C, ref to (fmax+fmin)/2			±1.0	ppm	
Tolerance at +25°C				0		+1.0	ppm	
Versus ±5% change in supply voltage			Ref to frequency at nominal supply			±0.05	ppm	
Versus ±10% change in load			Ref to frequency at nominal load			±0.05	ppm	
Sub harmonics					-70	-65	dBc	
First Year Aging			@40°C			±1.0	ppm	
G Sensitivity			per axis		0.50		ppb/g	
Phase Noise			100 Hz		-105		dBc/Hz	
			1000 Hz		-128			
			10 KHz		-150			
			100 KHz		-170			
			1000 KHz		-175			
Short-Term Stability		ADEV	Tau = 1 second			1.0	E-10	
RMS Phase Jitter			12KHz-20MHz		15		fs	
Environmental Conditions								
Operating temperature range		-40°C to +85°C						
Reflow profiles as per IPC/JEDEC J-STD-020C		≤ 245 °C over 10 s max.						