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

TCXO914BT-LG-100MHz-A-V
Low G Sensitivity, Vibration and Shock resistant, Sinewave TCXO

Features and Benefits

Frequency range: 100MHz
Supply voltage: 3.3V
Steady current: 28mA Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±0.5ppm
Aging: ±1.0ppm per year
Phase noise@100KHz: -178dBc/Hz
Operating temperature: -40°C to +85°C
Size: 14x9x6.2mm
Package type: SMD

Typical Applications

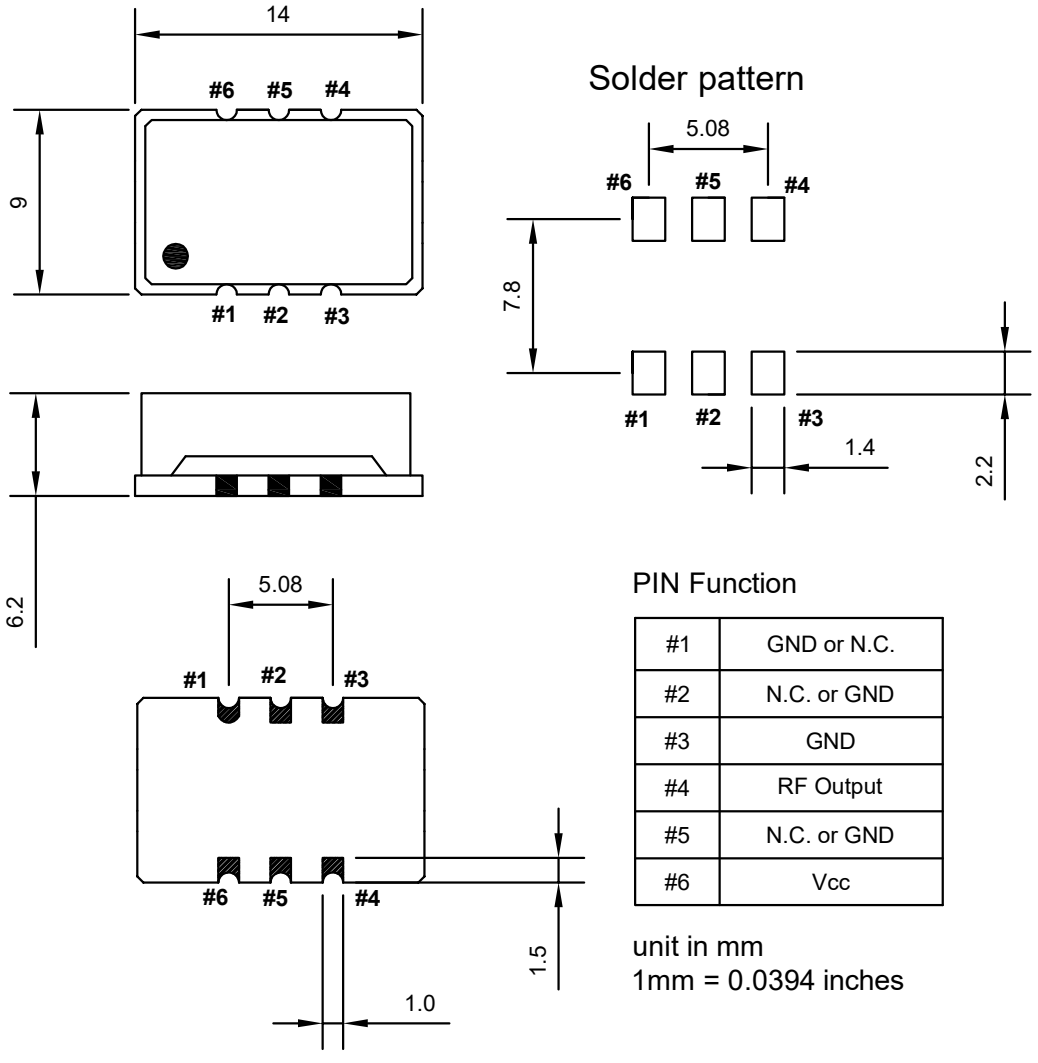
5G Repeater
Link and micro cells
Low noise microwave

Description

TCXO914BT-LG-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: MD240069-1



PIN Function

#1	GND or N.C.
#2	N.C. or GND
#3	GND
#4	RF Output
#5	N.C. or GND
#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

TCXO914BT-LG-100MHz-A-V
Low G Sensitivity, Vibration and Shock resistant, Sinewave TCXO

Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency		F_{nom}			100		MHz	
Sinewave	Output Level			+4			dBm	
	Output Load				50		ohm	
Power Supply								
Voltage		V_{cc}			3.3		V	
Current Consumption						28	mA	
Frequency Stability								
Versus temperature			-40°C to +85°C, ref to (fmax+fmin)/2			±0.5	ppm	
Tolerance at +25°C						+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	
Harmonics						-30	dBc	
Sub-harmonics/Spurious						-60	dBc	
First Year Aging			@40°C			±1.0	ppm	
G Sensitivity			per axis		0.25		ppb/g	
Phase Noise			10 Hz			-85	dBc/Hz	
			100 Hz			-110		
			1 KHz			-132		
			10 KHz			-161		
			100 KHz			-178		
			1 MHz			-180		
Short-Term Stability		ADEV	Tau = 1 second			1.0	E-10	
RMS Phase Jitter			12KHz-20MHz		30		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.						

Note: Unless otherwise specified conditions are @+25 °C