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

TCXO3225T-10MHz-B-V

Clipped Sine Wave; 3.3V supply; VCTCXO

Features and Benefits

10.000000 MHz
Temp. stability less than ± 0.5 ppm
-40 ℃ to +85℃ operation
+3.3V supply; Voltage-controlled

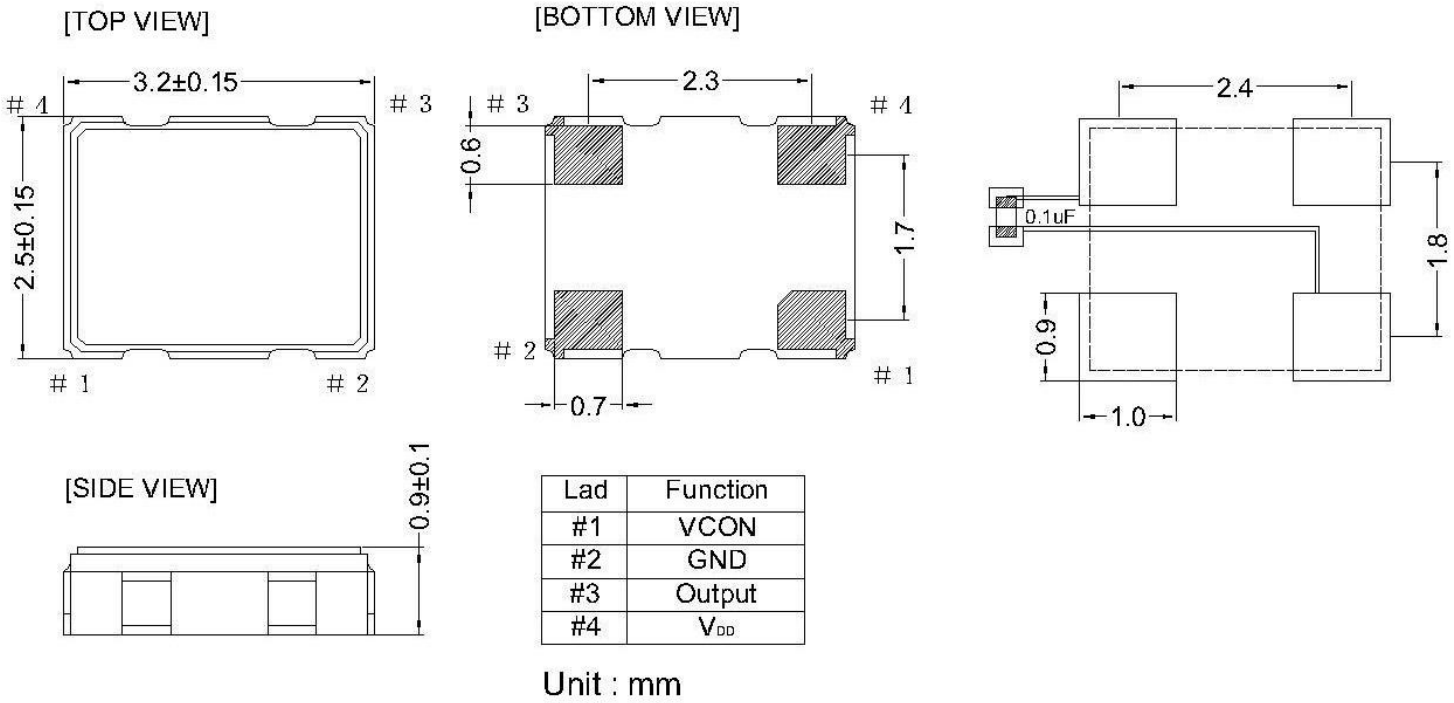
Description

The TCXO3225T-10MHz-B-V design technology offers a new generation IC compensation with better phase noise and lower ultimate stability over operating temperature.

Typical Applications

Beidou Navigation Reference Oscillator
SATCOM SYSTEMS (ON THE MOVE; MOBILE)
Mobile Radio

Mechanical Drawing & Pin Connections



Lad	Function
#1	VCON
#2	GND
#3	Output
#4	V_{DD}

Unit : mm

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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F_{nom}			10.000		MHz	
Output Waveform		DC Coupled clipped sine wave		Clipped sine wave			
Output Voltage Level			0.8		2.0	Vp-p	
Output Load				10Kohm // 10pF			
Startup Time					2.0	ms	
Power Supply							
Supply Voltage			3.135	3.30	3.465	V	
Supply Current		At maximum supply voltage			2.0	mA	
Frequency Control* (Electronic + Mechanical)							
Control Voltage Range			0.5	1.5	2.5	V	
Pulling Range		Referenced to Vcon at 1.5V	+/-5.0			ppm	
Vcon Input Impedance		Measured between Vcon and GND pin	500			kOhm	
Linearity					10.0	%	
Frequency Stability							
Nominal Frequency Tolerance		Frequency at 25℃, 1 hour after 2 times reflow	-2.0		+2.0	ppm	
Frequency Stability Vs. Temperature		Referenced to the midpoint between minimum and maximum frequency value	-0.5		+0.5	ppm	
Temperature Range		The operating temperature range over which the frequency stability is measured	-40		+85	℃	
Frequency Stability Vs.Supply Voltage		supply voltage varied +/-5% at 25℃	-0.2		+0.2	ppm	
Frequency Stability Vs. Load		+/-10% load change	-0.2		+0.2	ppm	
Aging		first year at 25℃	-1.0		+1.0	ppm	
SSB Phase Noise (At 25℃) @10.000000 Mhz		10 Hz offset		-95		dBc/Hz	
		100 Hz offset		-120			
		1 KHz offset		-140			
		10 KHz offset		-148			
		100 KHz offset		-150			
Environmental Conditions							
Vibration Test		MIL-STD-883 2007 Condition A: 10~2000Hz, 1.52mm, 20G, each axis for 4 hrs					
Thermal Shock		MIL-STD-883 1010 Condition B: -55℃, 125℃; Soak time is 10 mins, with total 200 cycles					
Mechanical Shock		MIL-STD-883 2002 Condition B: 1500G, half-sine, 0.5ms, each axis for 3 times					
Storage Temperature		-40℃ to +85℃					