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

TCXO3225S_series
Clipped Sine Wave10 to 52MHz
Temperature Compensated Crystal Oscillator

Features and Benefits

Frequency Range from 10 MHz to 52 MHz
3.2 mm x 2.5 mm ceramic SMD package
Up to ±0.5 ppm (depends on operating frequency and operating temperature)
Clipped Sine Wave outputs
1.8V, 2.5V or 3.0V supply
Low height and light weight
Compatible for automatic assembly

Description

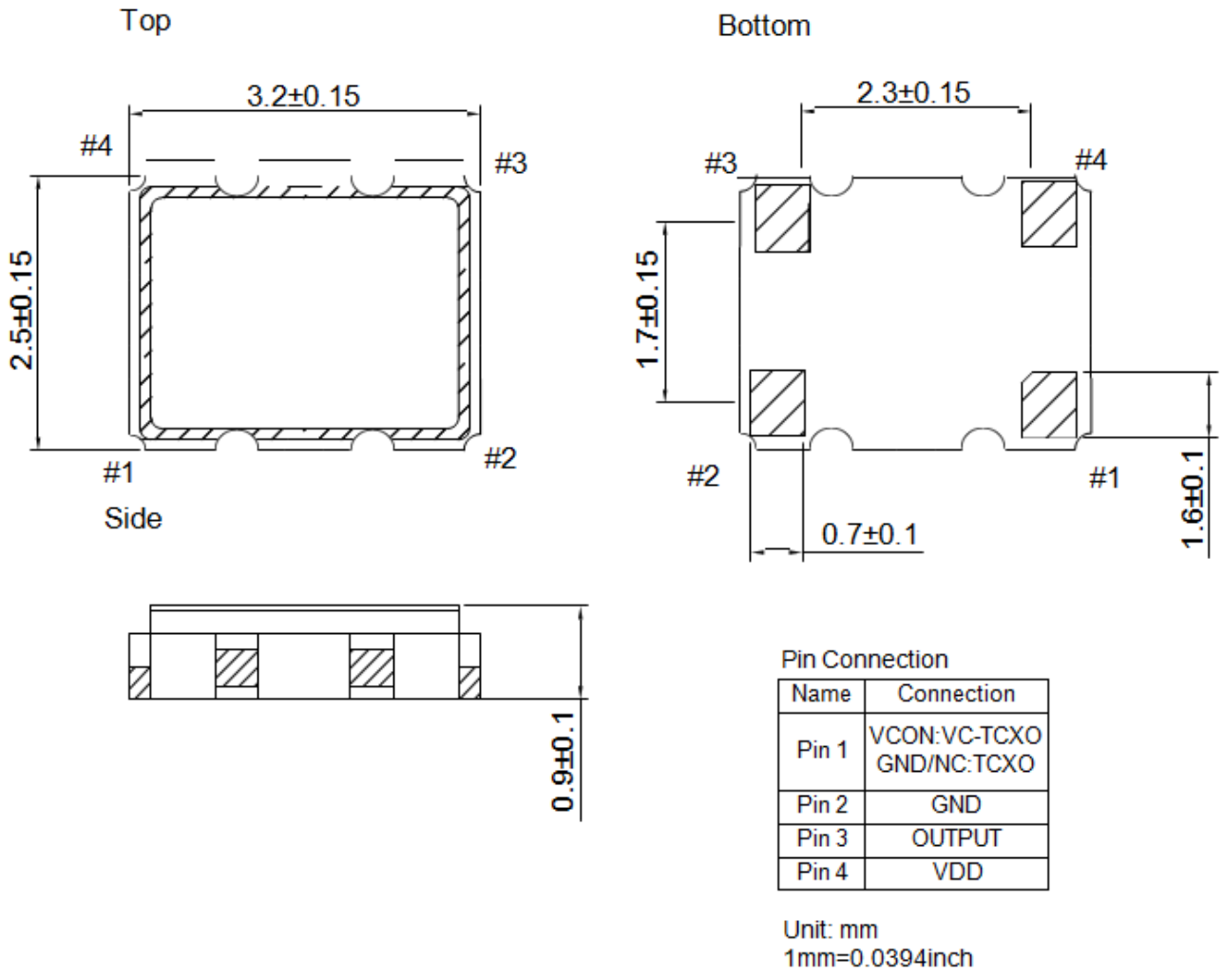
A new series of low height temperature compensated crystal oscillators with the latest low noise integrated circuit topologies.

Typical Applications

WiMAX, WLAN
GPS
Mobile phone

Mechanical Drawing & Pin Connections

Drawing No: **MD160035-1**



Pin Connection

Name	Connection
Pin 1	VCON:VC-TCXO GND/NC:TCXO
Pin 2	GND
Pin 3	OUTPUT
Pin 4	VDD

Unit: mm
1mm=0.0394inch

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Specifications

General Specifications							
		1.8V		2.5V		3.0V	
Parameter		Min.	Max.	Min.	Max.	Min.	Max.
Frequency Range		13MHz	52MHz	10MHz	52MHz	10MHz	52MHz
Standard Frequency		10.000000MHz, 12.800000MHz, 13.000000MHz, 16.367667MHz, 16.368000MHz, 16.369000MHz, 19.200000MHz, 19.440000MHz, 20.000000MHz, 25.000000MHz, 26.000000MHz, 27.000000MHz, 30.000000MHz, 30.720000MHz, 32.000000MHz 32.000000MHz, 38.400000MHz, 40.000000MHz					
Frequency Tolerance* (at 25°C, 1 hour after reflow)		-	±2.0ppm	-	±2.0ppm	-	±2.0ppm
Frequency Stability							
Vs Supply Voltage (±5%) change		2	±0.2ppm	-	±0.2ppm	-	±0.2ppm
Vs Load (±10%) change		-	±0.2ppm	-	±0.2ppm	-	±0.2ppm
Vs Aging (@1st year)		-	±1.0ppm	-	±1.0ppm	-	±1.0ppm
Supply Voltage Variation (V_{DD}) ±5%		1.710V	1.890V	2.375V	2.625V	2.850V	3.150V
Supply Current							
10 MHz ≤ Fo ≤ 26 MHz		-	2.0mA	-	2.0mA	-	2.0mA
26 MHz ≤ Fo ≤ 52 MHz		-	2.5mA	-	2.5mA	-	2.5mA
Output Level (Clipped Sine Wave)		0.8Vp-p	-	0.8Vp-p	-	0.8Vp-p	-
Load		10KΩ // 10pF					
Control Voltage Range (VCTCXO)		0.3V	1.5V	0.4V	2.4V	0.5V	2.5V
Pulling Range (VCTCXO)		±5.0ppm	-	±5.0ppm	-	±5.0ppm	-
Vc Input Impedance (VCTCXO)		500kΩ	-	500kΩ	-	500kΩ	-
Phase Noise @ 19.2 MHz	100 Hz	-115dBc/Hz					
	1 kHz	-135dBc/Hz					
	10 kHz	-148dBc/Hz					
Start-up Time		2ms max.					
Storage Temp. Range		-40°C to +85°C					

Stability vs. Temperature Range Availability			
	Temperature Range		
Stability in ppm	-20°C to +70°C	-30°C to +85°C	-40°C to +85°C
±0.5	Available	Conditional (depends on operating frequency; case by case)	Conditional (depends on operating frequency; case by case)
±1.0	Available	Available	Conditional (depends on operating frequency; case by case)
±1.5	Available	Available	Available
±2.0	Available	Available	Available
±2. 5	Available	Available	Available

Other customized specifications may be available. Please contact Dynamic Engineers Inc. for further details.