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

TCXO2520S_series
Clipped Sine Wave10 to 52MHz
Temperature Compensated Crystal Oscillator

Features and Benefits

Frequency Range from 10 MHz to 52 MHz
2.5 mm x 2.0 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 2.8V supply
Low height and light weight
Compatible for automatic assembly

Typical Applications

WiMAX, WLAN
GPS
Mobile phone

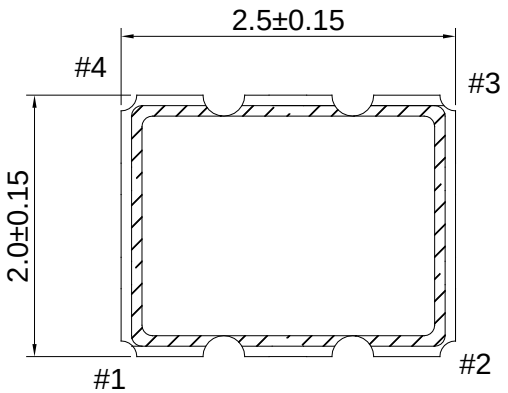
Description

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

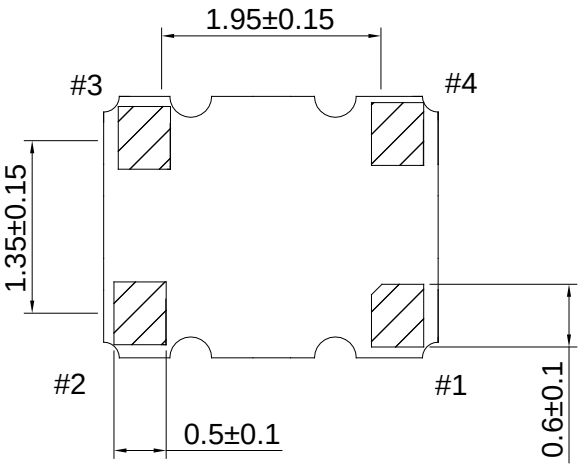
Mechanical Drawing & Pin Connections

Drawing No:MD160034-1

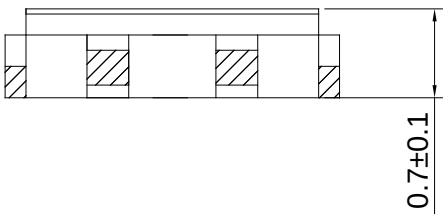
Top



Bottom



Side



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

Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and graphs without notification to potential customers who may have earlier revisions in their possession.

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Specifications

General Specifications							
Parameter		1.8V		2.5V		2.8V	
		Min.	Max.	Min.	Max.	Min.	Max.
Frequency Range		10MHz	52MHz	10MHz	52MHz	10MHz	52MHz
Standard Frequency		16.367667MHz, 16.368000MHz, 16.369000MHz, 19.200000MHz, 19.680000MHz, 20.000000MHz, 26.000000MHz, 40.000000MHz, 50.000000MHz, 52.000000MHz					
Frequency Tolerance* (at 25°C, 1 hour after reflow)		-	±2.0ppm	-	±2.0ppm	-	±2.0ppm
Frequency Stability Vs Supply Voltage (±5%) change Vs Load (±10%) change Vs Aging (@1st year)		 - - -	 ±0.2ppm ±0.2ppm ±1.0ppm	 - - -	 ±0.2ppm ±0.2ppm ±1.0ppm	 - - -	 ±0.2ppm ±0.2ppm ±1.0ppm
Supply Voltage Variation (V_{DD}) ±5%		1.710V	1.890V	2.375V	2.625V	2.660V	2.940V
Supply Current 10 MHz ≤ Fo ≤ 26 MHz 26 MHz ≤ Fo ≤ 52 MHz		 - -	 2.0mA 2.5mA	 - -	 2.0mA 2.5mA	 - -	 2.0mA 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	0.4V	2.4V
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 maybe available. Please contact Dynamic Engineers Inc. for further details.

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