



Features and Benefits

- Frequency Range from 5 MHz to 52 MHz
- 7.0 mm x 5.0 mm ceramic SMD package
- Up to ± 0.5 ppm (depends on operating frequency and operating temperature)
- HCMOS and Clipped Sine Wave output
- 2.5V or 3.3V supply
- Low power consumption
- Compact and light weight
- Compatible for automatic assembly

Description

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

Typical Applications

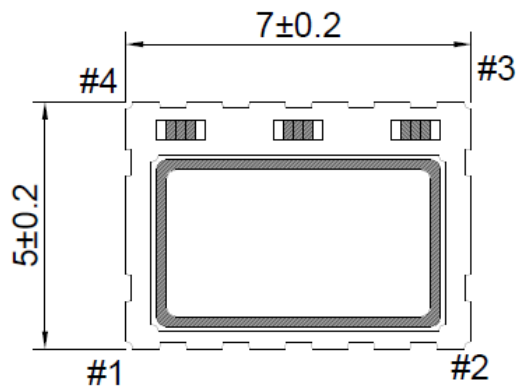
- WIFI/WiMAX, WLAN, Wireless Communications
- Base Stations, Femtocell
- Mobile phone

Mechanical Drawing & Pin Connections

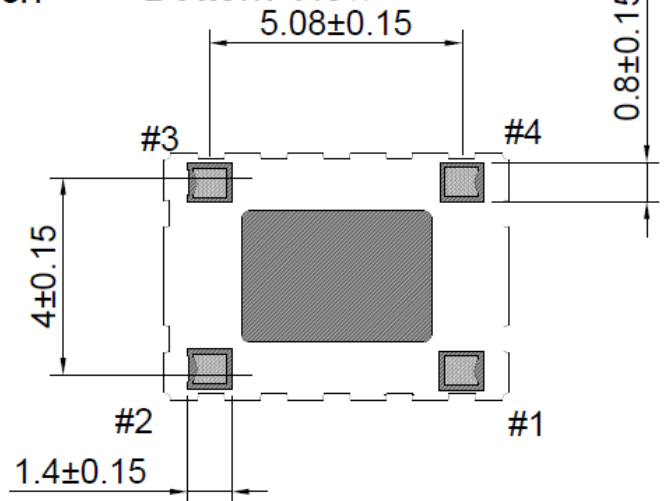
Drawing No: **MD160036-1**

Unit : mm
1mm=0.0394inch

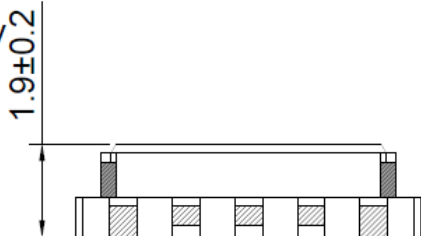
Top View



Bottom View



Side View



Pin	Function
#1	VCON:VC-TCXO GND/NC:TCXO
#2	GND
#3	Output
#4	VDD



Specifications

General Specifications				
Parameter	2.5V		3.3V	
	Min.	Max.	Min.	Max.
Frequency Range	5MHz	52MHz	5MHz	52MHz
Standard Frequency (for HCMOS)	5.000MHz, 6.400MHz, 8.000MHz, 8.192MHz, 10.000MHz, 12.500MHz, 12.800MHz, 16.000MHz, 16.384MHz, 19.440MHz, 25.000MHz, 26.000MHz, 40.000MHz			
Standard Frequency (for Clipped Sine Wave)	8.000MHz, 8.192MHz, 10.000MHz, 12.500MHz, 12.800MHz, 16.000MHz, 16.384MHz, 19.440MHz, 25.000MHz, 26.000MHz, 40.000MHz			
Frequency Tolerance* (at 25°C, 1 hour after reflow)	-	±2.0ppm	-	±2.0ppm
Frequency Stability Vs Supply Voltage (±5%) change Vs Load (±10%) change Vs Aging (@1 st year)	- - -	±0.1ppm ±0.2ppm ±1.0ppm	- - -	±0.2ppm- ±0.2ppm ±1.0ppm
Supply Voltage Variation (V _{DD}) ±5%	2.375V	2.625V	3.135V	3.465V
Supply Current Clipped Sine Wave HCMOS	- -	3.5mA 6.0mA	- -	3.5mA 6.0mA
Output Level (Clipped Sine Wave)	0.8Vp-p	-	0.8Vp-p	-
Output Level (HCMOS) Output High (Logic "1") Output Low (Logic "0") Duty	2.25V - 45%	- 0.25V 55%	2.97V - 45%	- 0.33V 55%
Load (Clipped Sine Wave)	10KΩ // 10pF			
Load (HCMOS)	15pF			
Control Voltage Range (VCTCXO)	0.5V	2.5V	0.5V	2.5V
Pulling Range (VCTCXO)	±5.0ppm	±12.0ppm	±5.0ppm	±12.0ppm
Vc Input Impedance (VCTCXO)	100kΩ	-	100kΩ	-
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	-55°C to +125°C			
Stability vs. Temperature Range Availability				
Temperature Range				
Stability in ppm	-20°C to +70°C		-30°C to +85°C	
±0.5 (10-26MHz with pulling range <8ppm available)	Available	Conditional (depends on operating frequency; case by case)		Conditional (depends on operating frequency; case by case)
±1.0	Available	Available		Available

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