



Features and Benefits

- 16KHz to 80MHz
- +1.8V and above
- High-shock & Vibration
- 100°C to +240°C
- Extended operating life

Typical Applications

Extreme Temperature such as downhole tools

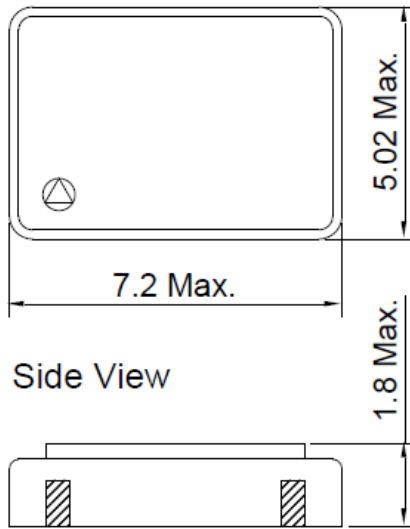
Description

Special extreme temperature components, assembly processes, and testing methods used to create a family of oscillator products capable of operating reliably @ + 240 °C.

Mechanical Drawing & Pin Connections

Drawing No: MD150059-1

Top View

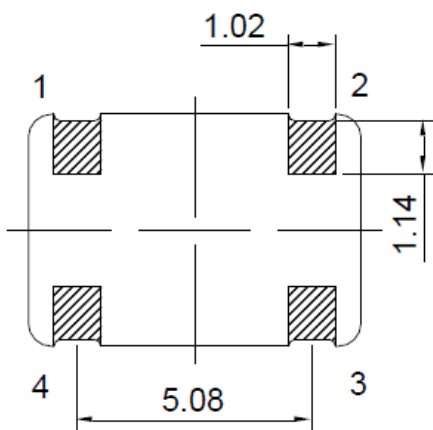


	A	B
Pin Functions:		
1	Pad	Function
2	1	NC or Tri-state
3	2	Ground (Case)
4	3	Output
5	4	Supply Voltage (Vcc)

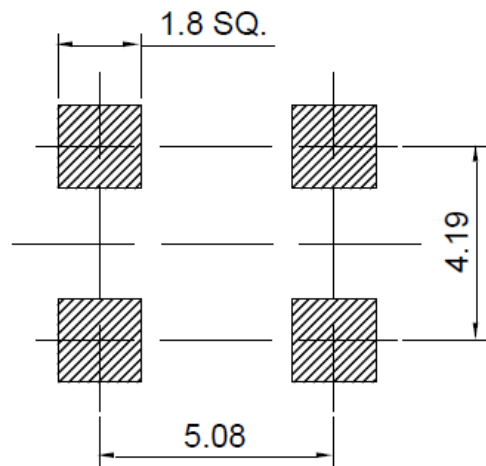
Unit : mm

Side View

Bottom View



Recommended Land Pattern





Specifications

Parameter	Specification	Note
Frequency Range	16KHz to 80MHz	
Overall Frequency Tolerance vs. Temperature	Typical: +/-100PPM, +/-150PPM, +/-175PPM, and +/-250PPM Example: +/-200PPM: -40°C to +200°C Example: +/-250PPM: -40°C to +230°C Example: +/-60PPM: 0°C to +200°C	
Supply Voltage(Vdd)	1.8V, 2.5V, 3.3V, 5V (all +/-10%) Inquire about lower voltage options.	
Supply Current	See table below	
Rise and Fall Time	1 – 10 nsec	
Start-up Time	10ms max. <5 ms typical	
Output	CMOS	SOI option
Output Enable Options	Enable on logic "1"	Available for temperature up to +230°C
Screening / Testing Available	Per MIL-PRF-55310	
Operating Temperature Range	-100°C to +210°C	Custom specified
Storage Temperature Range	-100°C to +235°C	

Supply Current Table

Voltage	Frequency							
	16KHz	32.768KHz	5MHz		16MHz		24MHz	
	Std. (mA)	Std. (mA)	Std. (mA)	Low Power (mA)	Std. (mA)	Low Power (mA)	Std. (mA)	Lower Power (mA)
+2.5V	0.125	0.25	0.8	0.25	2.5	0.6	4.5	0.8
+3.3V	0.23	0.45	1.2	0.45	4.0	0.8	6.0	1.1
+5.0V	0.6	1.1	2.6	0.75	8.0	1.4	11.0	1.9