## Features and Benefits

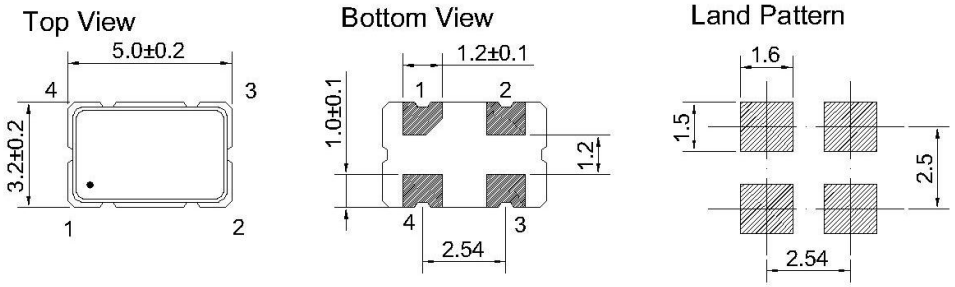
Ultra small SMD seam sealed spread spectrum.
Low EMI clock oscillator
SMD CMOS output
5.0x3.2x1.2mm
Tri-state function available

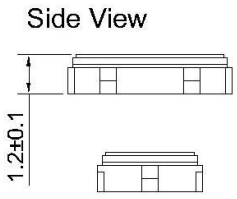
## Typical Applications

Printers; Multiple function printers(MPCs)
Digital copiers; PDAS
Networking; LAN/WAN; Routers
Storage systems(CD-ROM, VCD,DVD and HDD)
Scanner; Modems; Projectors
Embedded systems; Electrical musical instrument
Automotive; GPS car navigation systems
LCD PC monitors /LCD TVs
ADSL; PCMCIA
Still Digital cameras(SDCs)

## Mechanical Drawing & Pin Connections

MD140057-1




Pin Connections:

| | |
|---|---|
| Pad 1 | Enable/Disable |
| Pad 2 | Ground |
| Pad 3 | Output |
| Pad 4 | Supply |

Unit : mm

## Specification

| Oscillator Specification | | Sym | Condition | Value | | | Unit | Note |
|---|---|---|---|---|---|---|---|---|
| | | | | Min. | Typ. | Max. | | |
| Nominal Frequency | | $F_{nom}$ | | 6.0 | | 160.0 | MHz | |
| CMOS | Logic Level 1 | | At 90% VDD | 2.4 | 3.2 | | V | |
| | Logic Level 0 | | At 10% VDD | | 0.2 | 0.5 | V | |
| | Rise / Fall Time | | 10% VDD --- 90% VDD | | | 4 | ns | |
| | Duty Cycle | | CL=15pF; at 50% VDD | 45 | 50 | 55 | % | |
| | Cycle to cycle Jitter | | | | +/-250 | +/-300 | ps | |
| | Start Time | Ts | | | 2.0 | 5.0 | ms | |
| | Output Load | | | | 15 | | pF | |
| | EMI Reduction | | | -7 | | | dBc | |
| | Modulation Carried Frequency | | | 6.9 | | 55.5 | KHz | |
| | Spread Type/Total Spread Percentage | | | Center Spread / +/-0.25% | | | | |
| **Power Supply** | | | | | | | | |
| Supply Voltage | | $V_{cc}$ | | 3.135 | 3.3 | 3.465 | V | |
| Supply Current | | | 6.0 to 50.0MHz | | 10 | | mA | |
| | | | 50.1 to 100.0MHz | | 18 | | | |
| | | | 100.0 to 160.0MHz | | 35 | | | |
| **Aging** | | | | | | | | |
| Aging Per Year | | | at 25℃ | -5.0 | | +5.0 | ppm | |
| **Frequency Stability** | | | | | | | | |
| Frequency stability vs. temperature | | | | +/-25ppm | +/-50ppm | +/-100ppm | For standard please contact our sales. | |
| | | | -10℃ to +70℃ | √ | √ | √ | | |
| | | | -40℃ to +85℃ | √ | √ | √ | | |