



Features and Benefits

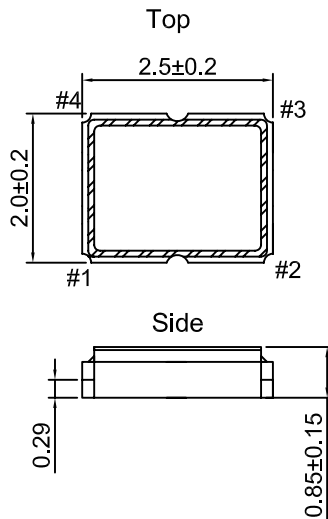
- 9.5MHz—60MHz Frequency range
- 1.8V, 2.5V, and 3.3V Supply voltage
- CMOS Output waveform
- ±2.5ppm Stability Vs -40C ~ +85C
- 2.5x2.0mm Size

Typical Applications

- Wireless Connectivity
- Smart grid

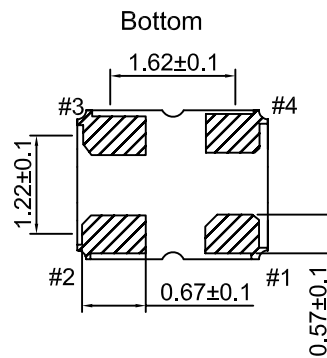
Mechanical Drawing & Pin Connections

Drawing No: MD160028-1

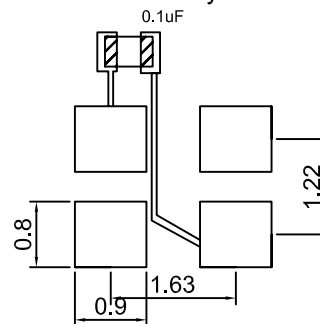


| PIN | FUNCTION |
|-----|-----------|
| #1 | Tri-state |
| #2 | GND |
| #3 | OUTPUT |
| #4 | VDD |

Unit : mm
 1mm = 0.0394 inches



Soleer Pad Layout



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vdd and GND pads.



Specifications

| Specification | Condition | 3.3V | | 2.5V | | 1.8V | | Unit |
|-------------------------------|--------------------------|-----------------|-------|-------|-------|------|------|------------|
| | | Min. | Max. | Min. | Max. | Min. | Max. | |
| Supply Voltage Variation(VDD) | ±5% | 3.135 | 3.465 | 2.375 | 2.625 | 1.71 | 1.89 | V |
| Frequency Range | | 9.5 | 60 | 9.5 | 60 | 9.5 | 60 | MHz |
| Aging(first year) | @25°C | | ±1.0 | | ±1.0 | | ±1.0 | ppm |
| Supply Current | 9.5MHz≤Fo≤60MHz | - | 10 | - | 7 | - | 5 | mA |
| Output Level(CMOS) | High (logic 1) | 2.97 | - | 2.25 | - | 1.62 | - | V |
| | Low (logic 0) | | 0.33 | | 0.25 | | 0.18 | V |
| Duty Cycle | | 45 | 55 | 45 | 55 | 45 | 55 | % |
| Rise/Fall time | | | 8 | | 8 | | 8 | nSec |
| Start Time | | | 5 | | 5 | | 5 | mSec |
| Tri-state(input to pin1) | Enable(high or floating) | 2.31 | | 1.75 | | 1.26 | | V |
| | Disable(low or GND) | | 0.99 | | 0.75 | | 0.54 | V |
| RMS Phase Jitter | Integrated 12kHz-20MHz | | 1 | | 1 | | 1 | pSec |
| Phase Noise@26MHz | | | | | | | | |
| 10Hz | | | -80 | | -80 | | -80 | |
| 100Hz | | | -110 | | -110 | | -110 | dBc/H z |
| 1KHz | | | -130 | | -130 | | -130 | |
| 10KHz | | | -145 | | -145 | | -145 | |
| Storage Temp. Range | | -55°C to +125°C | | | | | | °C |

Frequency Stability vs. Temperature

| | ±2.5PPM | ±5.0PPM | ±10PPM |
|-----------------|---------------|-------------|-----------|
| -40°C to +85°C | Available | Available | Available |
| -40°C to +90°C | Conditional | Available | Available |
| -40°C to +105°C | Not Available | Conditional | Available |

Note: not all combination of options are available. Other specifications may be available upon request.