



Features and Benefits

- 2.0x1.6 size, low profile of 0.75mm
- Frequency range from 4MHz to 54MHz
- Low voltage operation
- Low current consumption
- 3-state function
- Automatic mounting and reflow soldering
- RoHS Compliant /Pb Free

Typical Applications

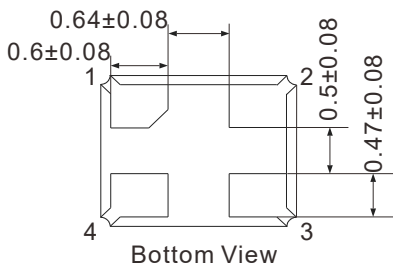
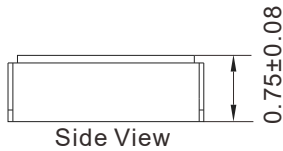
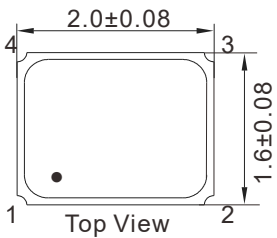
- IWLAN
- GPS
- Bluetooth,
- Smart phone, Cellular, DVC, etc.

Description

XO2016AL offers frequency range from 4MHz to 54MHz, high precision and high frequency stability, allowing for high density surface mounting, Ideally suited designed for use in Portable Applications.

Mechanical Drawing & Pin Connections

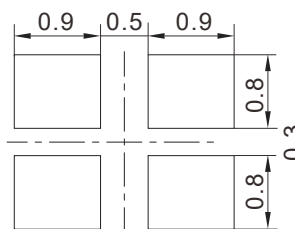
Drawing No: MD20001+-1



Pin Connections

| Pin | Connection |
|-----|--------------------|
| 1 | OE (Output Enable) |
| 2 | GND |
| 3 | Output |
| 4 | Vcc |

Unit in mm
1mm = 0.0394 inches





Specifications

| Oscillator Specification | Sym | Condition | Value | | | Unit | Note |
|---------------------------------|-----------------|-----------------|--|------|------|------|------------------------|
| | | | Min. | Typ. | Max. | | |
| Frequency | F | | 4 | | 54 | MHz | |
| Output | | | CMOS | | | | |
| Oscillator Mode | | | Fundamental | | | | |
| Rise Time / Fall Time | Tr / Tf | | | | 5.0 | nsec | |
| Start Time | | | | | 5 | msec | |
| Output Load | | | | 15 | | pF | |
| Symmetry (Duty ratio) | | | 45 | | 55 | % | |
| Power Supply | | | | | | | |
| Supply Voltage | V _{DD} | | | 3.3 | | V | (1.8V, 2.5V available) |
| Supply Current | | | | | 5 | mA | |
| Voltage Vol (Max.) /Voh (Min.) | | | 0.1 V _{DD} /0.9 V _{DD} | | | | |
| Frequency Stability | | | | | | | |
| Frequency Stability | | | ±25ppm, ±50ppm | | | ppm | |
| Aging | | @+25°C 1st year | | | ±3 | ppm | |
| Phase Jitter (12KHz~20MHz) | | | | | 1 | pS | |
| Environmental Conditions | | | | | | | |
| Operating temperature range | | -40°C to +85°C | | | | | |
| Storage temperature range | | -55°C to +125°C | | | | | |