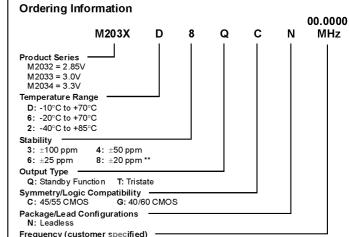
M2032, M2033, and M2034 Series

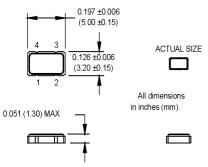
3.2 x 5.0 x 1.3 mm HCMOS Compatible Surface Mount Oscillators

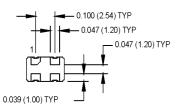


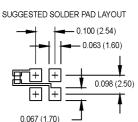
- ±20 ppm stability
- · Tri-state or standby function
- Ideal for WLAN and IEEE802.11 Applications
- · Low power applications











| | | ackage/Lead Co N: Leadless requency (custo | • | | | | | | |
|-----------------------|--------|--|-----------|---------|--------|------------|-----|--|--|
| | Com.cn | | | | | | | | |
| PARAMETER | Symbol | Min. | Тур. | Max. | Units. | Condition | | | |
| Frequency Range | F | 1.5 | | 80 | MHz | See Note 1 | | | |
| Frequency Stability | ΔF/F | | | ±20 | ppm | See Note 2 | | | |
| Operating Temperature | TA | (See Order | ing Infor | mation) | | | 1 | | |
| Input Voltage | Vdd | 3.15 | 3.3 | 3.45 | V | 3.3V | 1 | | |
| | | 2 0 5 | 20 | 2.45 | 1.77 | 2 01/ | - 1 | | |

Pin Connections

| PIN | Function |
|-----|------------------|
| 1 | Standby/Tristate |
| 2 | Ground |
| 3 | Output |
| 4 | +Vdd |

| | PARAMETER | Symbol | win. | iyp. | Max. | Units. | Condition |
|----------------|---------------------------|---|--|-----------|---------|--------|----------------|
| | Frequency Range | F | 1.5 | | 80 | MHz | See Note 1 |
| | Frequency Stability | ΔF/F | | | ±20 | ppm | See Note 2 |
| | Operating Temperature | TA | (See Order | ing Infor | | | |
| | Input Voltage | Vdd | 3.15 | 3.3 | 3.45 | V | 3.3V |
| Specifications | | | 2.85 | 3.0 | 3.15 | V | 3.0V |
| | | | 2.7 | 2.85 | 3.0 | V | 2.8V |
| | Input Current | ldd | | | | | |
| | 1.500 to 20.000 MHz | | | | 15 | mA | 3.3V |
| | 20.001 to 50.000 MHz | | | | 20 | mA | |
| | 50.001 to 80.000 MHz | | | | 45 | mA | |
| | Symmetry (Duty Cycle) | | 45 | | 55 | % | ½ Vdd |
| | Rise/Fall Time | Tr/Tf | | | | | |
| ů | 22.000 to 44.000 MHz | | | | 6 | ns | 10% to 90% Vdd |
| 3 | 80.000 MHz | | | | 4 | ns | 10% to 90% Vdd |
| Electrical | Logic "1" Level | Voh | 90% Vdd | | | V | |
| | Logic "0" Level | Vol | | | 10% Vdd | V | |
| Ī | Output Current | loh | -2 | | | mA | |
| | | Lol | +2 | | | mA | |
| | Output Load | | | | 15 | pF | |
| | Start-up Time | | | | 5 | ms | |
| | Standby Current | | | | 10 | ms | |
| | Standby/Tristate Function | | Pin 1 high or floating: clock signal output | | | | |
| | | | Pin 1 low: output disables to high impedance | | | | |
| | Output Disable Time | | | | 150 | ns | |
| L | Output Enable Time | | | | 5 | ms | |
| - | | | | | | | |
| Environmental | Mechanical Shock | Per MIL-STD-202, Method 213, Condition C | | | | | |
| 8 | Vibration | Per MIL-STD-202, Method 201 & 204 | | | | | |
| 3 | Reflow Solder Conditions | 240°C for 10 s max | | | | | |
| 1 | Hermeticity | Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium) | | | | | |
| ءَ ا | Solderability | Per EIAJ-STD-002 | | | | | |
| " | ' | | | | | | |

- 1.Consult factory for available frequencies in this range.
- 2.Inclusive of calibration, deviation over temperature, supply voltage change, load change, shock, vibration, and 10 years aging

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.



MtronPTI Lead Free Solder Profile

