# K1603T Series
## 14 pin DIP, 5.0 Volt, CMOS/TTL, VCXO

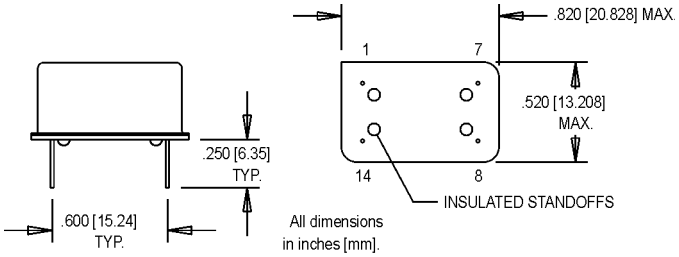


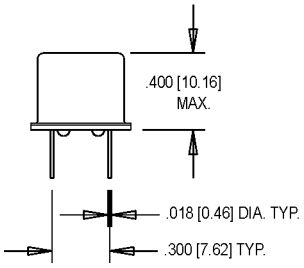
- Former Champion Technologies, Inc. Product
- Clocking "Sync" to NTSC Video Standards, Reference Signal, Signal Tracking
- Stratum 3 Compliant

**Ordering Information**

K1603T -R 00.0000 MHz

- Product Series
- RoHS Compliance
  - Blank: non-RoHS compliant part
  - -R: RoHS compliant part
- Frequency (customer specified)




**Pin Connections**

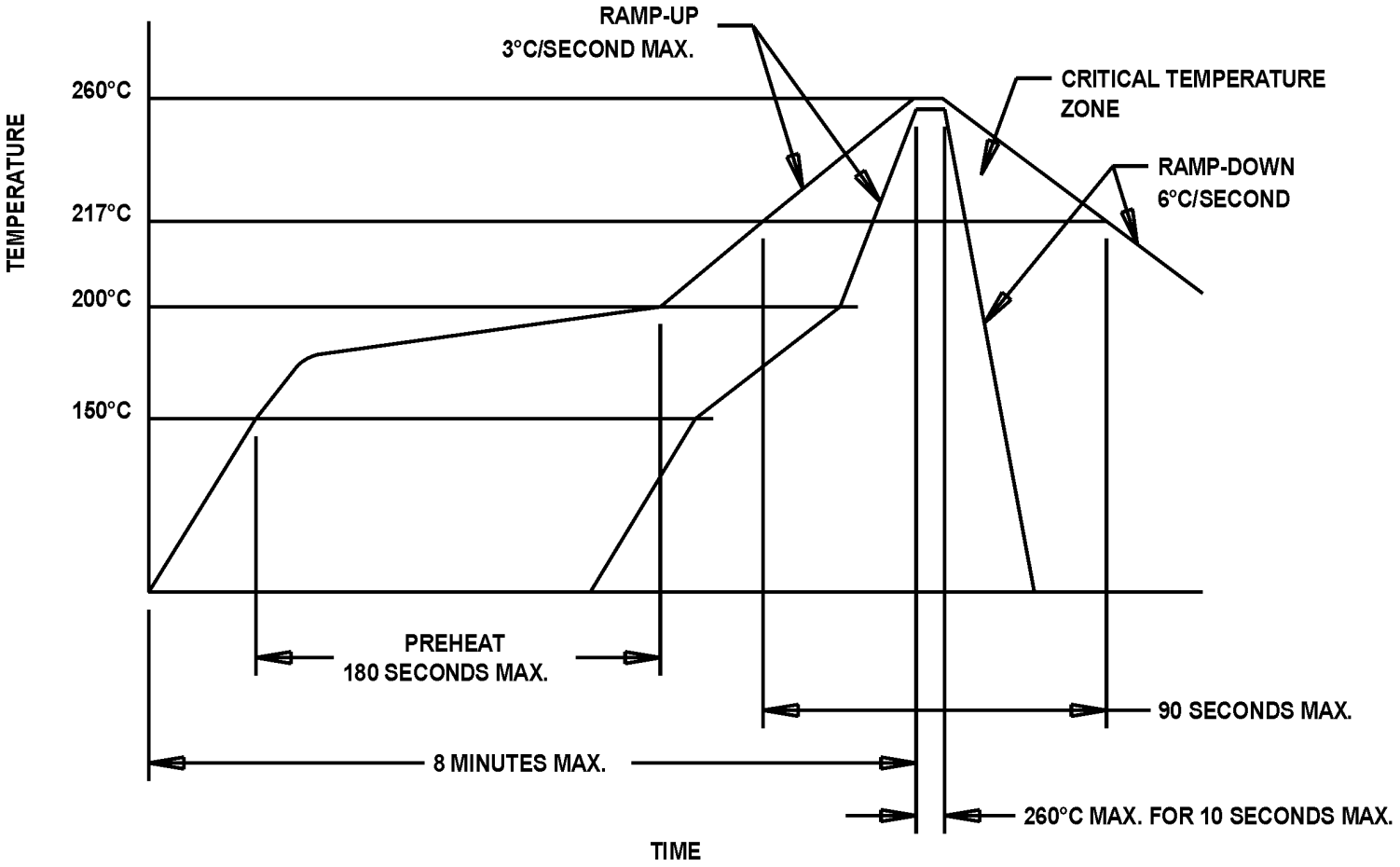
| PIN | FUNCTION |
|---|---|
| 1 | N/C |
| 7 | Ground/Case Ground |
| 8 | Output |
| 14 | +Vdd |

| Electrical Specifications | PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition/Notes |
|---|---|---|---|---|---|---|---|
| | Frequency Range | F | 2 | | 30 | MHz | |
| | Operating Temperature | $T_A$ | -40 | | +85 | °C | |
| | Storage Temperature | Ts | -40 | | +85 | °C | |
| | Frequency Stability | ΔF/F | | | ±4.6 | ppm | |
| | Aging (10 Year) | | -2 | | +2 | ppm | |
| | Input Voltage | Vdd | 4.75 | 5.0 | 5.25 | V | |
| | Input Current | Idd | | | 20 | mA | |
| | Output Type | | | | | | HCMOS/TTL |
| | Load | | 5 TTL or 15 pF HCMOS | | | | See Note 1 |
| | Symmetry (Duty Cycle) | | | | | | See Note 2 |
| | <14 MHz | | 45 | | 55 | % | |
| | ≥14 MHz | | 40 | | 60 | % | |
| | Logic "1" Level | Voh | 4.5 | | | V | |
| | Logic "0" Level | Vol | | | 0.5 | V | |
| | Rise Time | Tr | | 3.5 | 9.0 | ns | |
| | Fall Time | Tf | | 2.0 | 8.0 | ns | |
| | Start up Time | | | | 10 | ms | |
| | Phase Noise (Typical) | 10 Hz | 100 Hz | 1 kHz | 10 kHz | 100 kHz | Offset from carrier |
| | @ 20 MHz | -80 | -108 | -125 | -132 | -155 | dBc/Hz |

1. TTL load - see load circuit diagram #1. HCMOS load - see load circuit diagram #2.
2. Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.

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# MtronPTI Lead Free Solder Profile




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