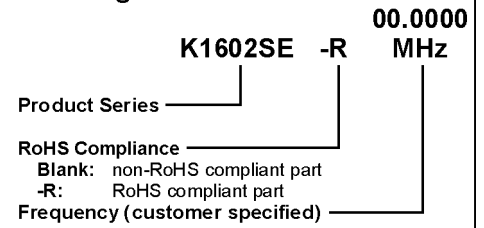


K1602SE Series

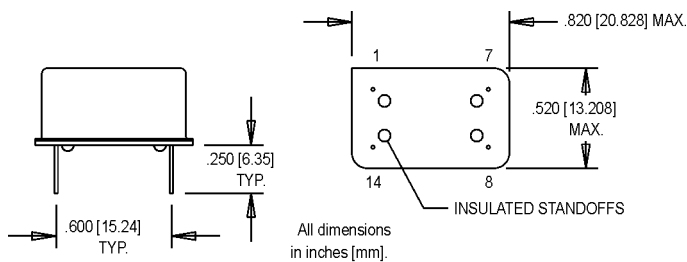
14 DIP, 5.0 Volt, Sinewave, TCVCXO



Ordering Information

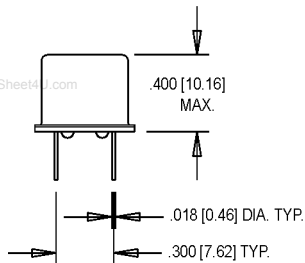


- Former **Champion** Product
TECHNOLOGIES, INC.
- Phase-Locked Loops, SONENT, Reference Signal, Signal Tracking, ATM



Pin Connections

| PIN | FUNCTION |
|-----|----------------------|
| 1 | EFC, Control Voltage |
| 7 | Ground/Case Gnd |
| 8 | Output |
| 14 | +Vdd |



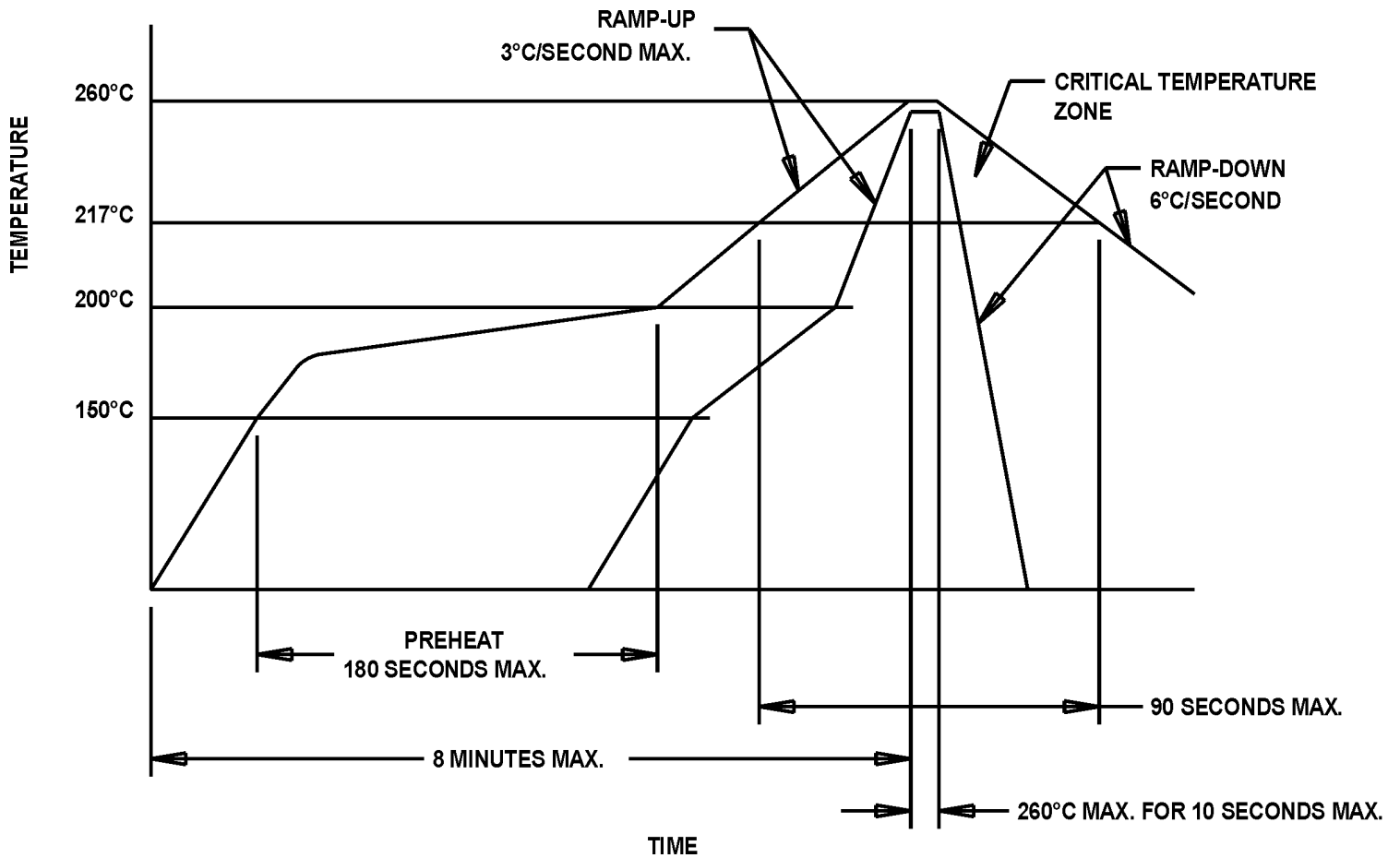
| | PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition/Notes |
|---------------------------|--------------------------|---|--------|-------|--------|---------|-------------------------------|
| Electrical Specifications | Frequency Range | F | 90 | | 115 | MHz | |
| | Operating Temperature | T _A | -40 | | +85 | °C | |
| | Storage Temperature | T _S | -40 | | +85 | °C | |
| | Frequency Stability | ΔF/F | | | ±7.0 | ppm | See Note 1 |
| | Aging (10 year) | | -2 | | +2 | ppm | |
| | Control Voltage | V _c | 0 | 2.0 | 4 | V | Positive monotonic slope |
| | Tuning Range | | ±4 | | ±15 | ppm | V _c = 0.5V to 3.5V |
| | Modulation Bandwidth | f _m | | | | kHz | ±3dB |
| | Input Impedance | Z _{in} | 50k | | | Ω | @ 10kHz |
| | Input Voltage | V _{dd} | 4.75 | 5.0 | 5.25 | V | |
| | Input Current | I _{dd} | | | 20 | mA | |
| | Output Type | | | | | | Sinewave |
| | Load | | | 50 Ω | | | See Note 2 |
| | Output Level | | 1.0 | | | V p-p | Into 50 Ω |
| | Output Power | P _o | | +2 | +4 | dBm | 50 Ω |
| | Start up Time | | | | 10 | ms | |
| Phase Noise (Typical) | | 10 Hz | 100 Hz | 1 kHz | 10 kHz | 100 kHz | Offset from carrier dBc/Hz |
| | | -65 | -95 | -120 | -140 | -150 | |
| Environmental | Mechanical Shock | Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave) | | | | | |
| | Vibration | Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz) | | | | | |
| | Hermeticity | Per MIL-STD-202, Method 112, (1x10 ⁻⁸ atm. cc/s of Helium) | | | | | |
| | Thermal Cycle | Per MIL-STD-883, Method 1010, Condition B (-55°C to +125°C, 15 min. dwell, 10 cycles) | | | | | |
| | Solderability | Per EIAJ-STD-002 | | | | | |
| Soldering Conditions | +240°C max. for 10 secs. | | | | | | |

- Inclusive of calibration, temperature, voltage, load and aging.
- See load circuit diagram #8

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.

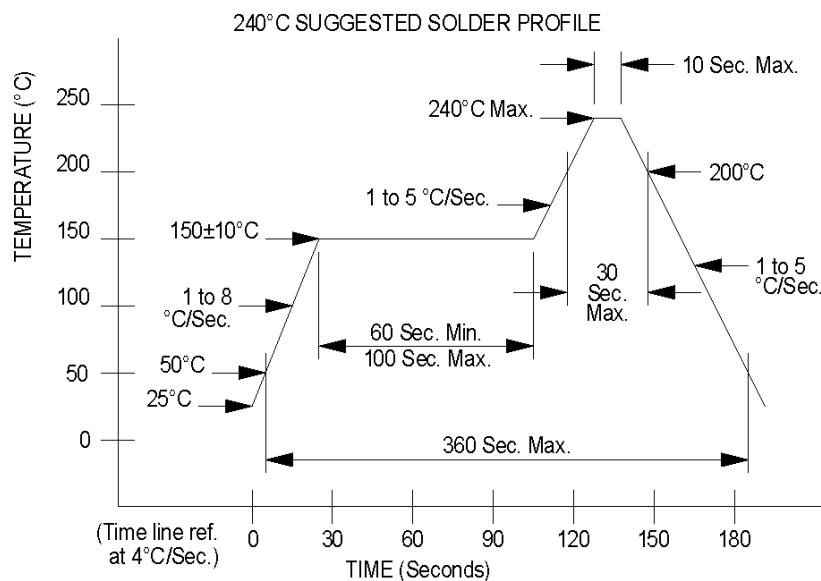
Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

MtronPTI Lead Free Solder Profile



MtronPTI Non-RoHS Profile

240°C
All the remaining surface mount,
both crystal and oscillator.



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