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## SPECIFICATION FOR SMT HIGH TEMPERATURE OSCILLATOR MtronPTI P/N M2002S214

## I. GENERAL & ELECTRICAL REQUIREMENTS:

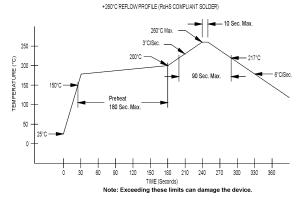
- 1. FREQUENCY OF OPERATION: 50.000000 MHz
- 2. FREQUENCY STABILITY: ± 100 ppm max.
- 3. OPERATING TEMPERATURE RANGE: -55°C to +125°C
- 4. OPERATING VOLTAGE: 3.3 V ± 0.15V
- 5. OPERATING CURRENT: 20 mA max.
- 6. OUTPUT TYPE: HCMOS/TTL Compatible
- 7. SYMMETRY: 40/60% ref. to 1/2 Vdd
- 8. RISE/FALL TIME: 6 nS max. ref. 10% to 90% Vdd
- 9. OUTPUT LOGIC LEVELS: VoL = 10% Vdd max. VoH = 90% Vdd min.
- 10. OUTPUT LOAD: 15 pF max.
- 11. JITTER (Cycle-to-Cycle): 15 pS RMS max.
- 12. TRISTATE FUNCTION (Pad 1): Logic "high" or "floating", clock signal output
  - Logic "low", output disables to high impedance state

.01 mFd

## **II. ENVIRONMENTAL & MECHANICAL REQUIREMENTS:**

- 1. SHOCK: MIL-STD-202, Method 213, Condition C.
- 2. VIBRATION: MIL-STD-202, Methods 201 & 204.
- 3. HERMETICITY: 1 X 10<sup>-8</sup> atm cc/sec min.
- 4. STORAGE TEMPERATURE: -55°C to +125°C
- 5. SOLDERABILITY: Per EIAJ-STD-002
- 6. MAXIMUM SOLDERING CONDITIONS: See figure 1
- 7. PACKAGE: 4 Pad leadless ceramic package. RoHS 6/6 compliant.

## **III. DIMENSIONS:**



0.071

(1.80)

0.165 (4.20)

Figure 1

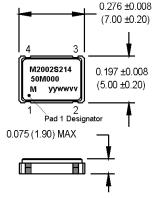
SUGGESTED SOLDER PAD LAYOUT

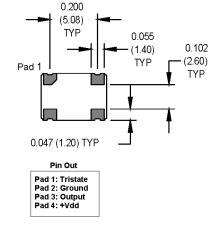
0 200

(5.08)

0.079 (2.00)

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Date	Rev.	Orig.	Details of Revision
2/10/04	0	WNJ	Original release.
12/2/08	A	WNJ	Updated to show RoHS compliance and Maximum Soldering Conditions.