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# SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2002S251

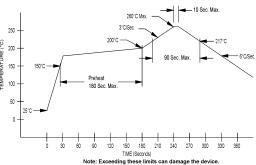
- 1. FREQUENCY OF OPERATION: 27.000000 MHz
- 2. FREQUENCY STABILITY: ± 50 ppm max. (Includes initial tolerance, deviation over temperature, shock, vibration, voltage & load variations, and aging.)
- 3. OPERATING TEMPERATURE RANGE: -55°C to +105°C
- 4. OPERATING VOLTAGE: 3.3 V ± 0.15V
- 5. OPERATING CURRENT: 20 mA max.
- 6. OUTPUT TYPE: HCMOS Compatible
- 7. SYMMETRY: 40/60% ref. to ½ Vdd
- 8. RISE/FALL TIME: 3 nS max. ref. 10% to 90% Vdd
- 9. OUTPUT LOGIC LEVELS: Vol = 10% Vdd max. Voh = 90% Vdd min.
- 10. OUTPUT LOAD: 15 pF.
- 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

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

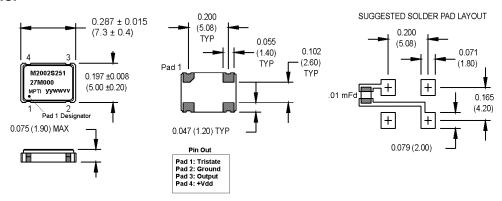
- 1. SHOCK: MIL-STD-202, Method 213, Condition C.
- 2. VIBRATION: MIL-STD-202, Methods 201 & 204.
- 3. HERMETICITY: 1 X 10<sup>-8</sup> atm cc/sec min.
- 4. STORAGE TEMPERATURE: -55°C to +125°C
- 5. SOLDERABILITY: Per EIAJ-STD-002
- 6. MAXIMUM SOLDERING CONDITIONS: See Figure 1.
- 7. APPROXIMATE THETA JA: 26°C/W
- 8. APPROXIMATE MAXIMUM JUNCTION TEMPERATURE: +107°C.
- 9. PACKAGE: 4 pad leadless ceramic package. RoHS compliant.

## Figure 1

+260°C REFLOW PROFILE (RoHS COMPLIANT SOLDER)



#### **III. DIMENSIONS:**



#### IV. DATA SHEET REVISION TABLE:

	111 57117 611221 172161611 173221			
	Date	Rev.	PCN	Details of Revision
ŀ	5/21/04	0	N/A	Original release.
	3/18/08	Α	N/A	Update to MtronPTI data sheet format. Supersedes 5/21/04 release.
	3/25/08	В	N/A	Added Thermal Information. Supersedes 3/18/08 release.