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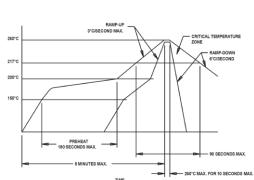
# SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2002S421

## I. GENERAL & ELECTRICAL REQUIREMENTS:

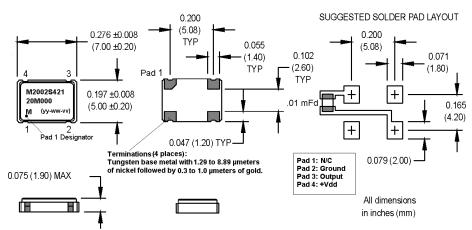
- 1. FREQUENCY OF OPERATION: 20.000000 MHz
- 2. FREQUENCY STABILITY: ± 50 ppm max. (Includes initial tolerance and deviation over temperature)
- 3. OPERATING TEMPERATURE RANGE: -55°C to +125°C
- 4. OPERATING VOLTAGE (Vdd): 3.3 V ± 0.3 V
- 5. OPERATING CURRENT: 10 mA max.
- 6. OUTPUT TYPE: HCMOS Compatible
- 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:  $V_{OL} = 10\%$  Vdd max.  $V_{OH} = 90\%$  Vdd min.
- 10. OUTPUT LOAD: 15 pF max.

#### **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. RoHS compliant.



### **III. DIMENSIONS:**



#### **IV. DATA SHEET REVISION TABLE:**

Date	Rev.	Author	Details of Revision
6/8/05	0	WNJ	Original release.
6/9/05	А	WNJ	Added L-3 Comm part number 45001041+001
6/24/09	В	WNJ	Corrected L-3 P/N to 40200050+000. Added updated RoHS reflow information.

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