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Figure 1

CRITICAL TEMPERATURE

90 SECONDS MAX

260°C MAX, FOR 10 SECONDS MAX

ZONE

RAMP-UP

PREHEAT ECONDS MAX

8 MINUTES MAX.

TIME

SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2010S065

I. GENERAL & ELECTRICAL REQUIREMENTS:

- 1. FREQUENCY OF OPERATION: 19.440000 MHz
- 2. FREQUENCY STABILITY OVER OPERATING TEMPERATURE: ± 15 ppm max.
- 3. OPERATING TEMPERATURE RANGE: 0°C to +70°C
- 4. OPERATING VOLTAGE (Vdd): 5.0 V ± 0.5 V
- 5. OPERATING CURRENT: 20 mA max.
- 6. OUTPUT TYPE: HCMOS/TTL Compatible
- 7. SYMMETRY: 40/60% ref. to ½ Vdd
- 8. RISE/FALL TIME: 10 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.
- 11. 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 -8 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 6/6 compliant.

III. DIMENSIONS:





SUGGESTED SOLDER PAD LAYOUT

EMPERATURE

217°0

200°0

150°0



IV. DATA SHEET REVISION TABLE:

| Date | Rev. | Author | Details of Revision |
|----------|------|--------|--|
| 11/30/04 | 0 | WNJ | Original release. |
| 3/10/09 | А | WNJ | Updated marking information, Added RoHS information and Maximum Soldering Conditions |