

SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2002S855

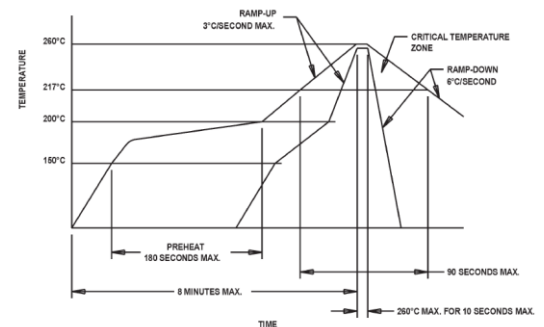
I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY OF OPERATION: 100.000000 MHz
2. FREQUENCY STABILITY: ± 50 ppm max.
3. OPERATING TEMPERATURE RANGE: -40°C to $+85^{\circ}\text{C}$
4. OPERATING VOLTAGE (Vdd): $3.3\text{ V} \pm 0.3\text{V}$
5. OPERATING CURRENT: 55 mA max.
6. OUTPUT TYPE: HCMOS/TTL Compatible
7. SYMMETRY: 40/60% ref. to $\frac{1}{2}$ Vdd
8. RISE/FALL TIME (Ref. 10% to 90%): 2 ns max.
9. OUTPUT LOGIC LEVELS: $V_{OL} = 10\%$ Vdd max. $V_{OH} = 90\%$ Vdd min.
10. OUTPUT LOAD: 15 pF/2 TTL max.
11. JITTER (Cycle-to-Cycle): 8 pS RMS max. 1 Sigma
12. TRISTATE FUNCTION (Pad 1): Logic "high" or "floating", clock signal output
Logic "low", output disables to high impedance state
13. TRISTATE INPUT CURRENT (Pad 1): 100 μA max.
14. START-UP TIME: 8.5 mS max. under load and over operating temperature.

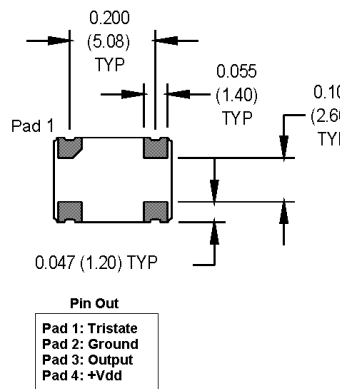
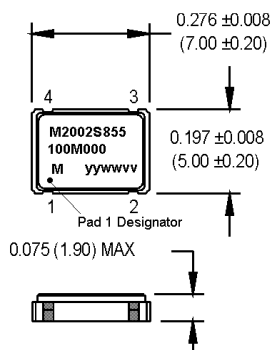
II. ENVIRONMENTAL & MECHANICAL REQUIREMENTS:

1. SHOCK: MIL-STD-202, Method 213, Condition C.
2. VIBRATION: MIL-STD-202, Methods 201 & 204.
3. EARLY FAILURE RATE: 400 ppm max.
4. LONG TERM RELIABILITY: 75 FIT @ $+45^{\circ}\text{C}$
5. HERMETICITY: 1×10^{-8} atm cc/sec min.
6. SOLDERABILITY: Per EIAJ-STD-002
7. MAXIMUM SOLDERING CONDITIONS: See Figure 1
8. PACKAGE: 4 - Pad leadless ceramic package.
RoHS compliant.

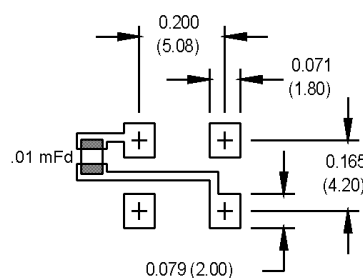
Figure 1



III. DIMENSIONS:



SUGGESTED SOLDER PAD LAYOUT



V. DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
4/9/09	0	WNJ	Original release.
6/25/09	A	WNJ	Changed Jitter spec from 15 ps to 8 ps RMS.