

SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2002S185

I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY: 4.096000 MHz
2. FREQUENCY STABILITY: ± 100 ppm
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: 10 mA max.
6. OUTPUT TYPE: HCMOS/TTL Compatible
7. SYMMETRY: 40/60% ref. to $\frac{1}{2}$ Vdd
8. RISE/FALL TIME: 6 nS max. ref. between 10% and 90%
9. OUTPUT LOGIC LEVELS: $V_{OL} = 10\%$ Vdd max. $V_{OH} = 90\%$ Vdd min.
10. OUTPUT LOAD: 15 pF max.
11. JITTER (Cycle-to-Cycle): 15 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. REFLOW SOLDER CONDITIONS: $+240^{\circ}\text{C}$ for 10 secs. max.
8. PACKAGE: 4 - Pad leadless ceramic package (M2 Type)

DIMENSIONS

