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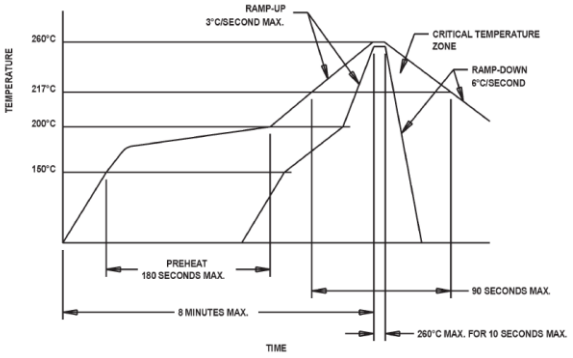
SPECIFICATION FOR SMT VCXO
MtronPTI P/N M3006S005

I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY OF OPERATION: 16.384000 MHz
2. FREQUENCY STABILITY: ± 50 ppm max.
3. OPERATING TEMPERATURE RANGE: -40°C to +85°C
4. OPERATING VOLTAGE: 3.3 V ± 5%
5. OPERATING CURRENT: 20 mA max.
6. OUTPUT TYPE: HCMOS Compatible
7. SYMMETRY: 40/60% min. ref. to ½ Vdd
8. RISE/FALL TIME: 5 nS max. ref. to 10% and 90%
9. OUTPUT LOGIC LEVELS: V_{OL}= 0.5 V max. V_{OH}= Vcc – 0.5 V min.
10. OUTPUT LOAD: 15 pF max.
11. PULLABILITY: ± 80 ppm min. ± 120 ppm typical , ± 160 ppm max.
12. CONTROL VOLTAGE RANGE: 0.3 V to 3.0 V (Center frequency at 1.65 V
13. MODULATION BANDWIDTH (Pad 1): 10 kHz min. (-3 dB)
14. LINEARITY: 15% max. with positive monotonic slope.
15. INPUT IMPEDANCE (Pad 1): 50 k ohm min.
16. TRISTATE FUNCTION (Pad 2): Logic "1", or floating; output enabled.
    Logic "0" disables output to high impedance.
17. JITTER: 5 pS RMS max. (12 kHz to 20 MHz)
18. PHASE NOISE (Typical): 10 Hz - 60 dBc/Hz, 100 Hz - 90 dBc/Hz, 1 kHz –112 dBc/Hz, 10 kHz – 140 dBc/Hz, 100 kHz – 150 dBc/Hz

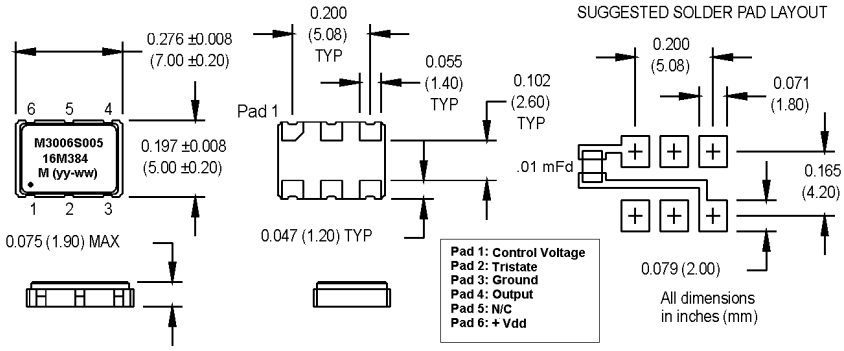
Figure 1



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 +85°C
5. SOLDERABILITY: Per EIAJ-STD-002
6. MAXIMUM SOLDERING CONDITIONS: See Figure 1.
7. PACKAGE: 6 – Pad leadless ceramic package.
   RoHS compliant.

III. DIMENSIONS:



IV. DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
1/13/03	0	WNJ	Original release.
3/22/10	A	WNJ	Corrected Tri-state Function pad identification to Pad 2. Changed "Typical" pullabillity to ± 120 ppm.

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