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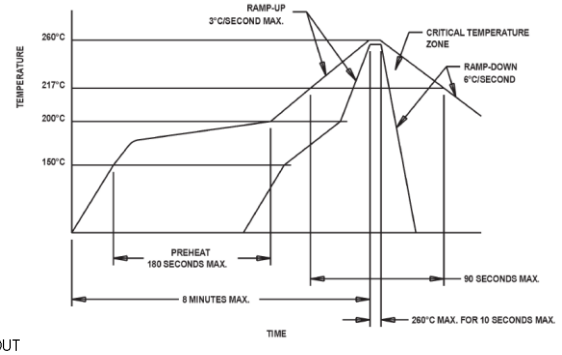
SPECIFICATION FOR SMT LVDS OUTPUT OSCILLATOR
MtronPTI P/N M2100S104

I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY OF OPERATION: 159.375000 MHz
2. FREQUENCY STABILITY: ± 20 ppm max. (Includes initial tolerance, deviation over temperature, shock, vibration, supply, and first year aging at +50°C).
3. FREQUENCY VS. AGING: ± 3 ppm max. first year. ± 1 ppm/year max. thereafter.
4. OPERATING TEMPERATURE RANGE: -40°C to +85°C
5. OPERATING VOLTAGE (Vcc): 3.3 V ± 0.165 V
6. OPERATING CURRENT: 125 mA max.
7. OUTPUT TYPE: Differential LVDS compatible
8. SYMMETRY: 45/55% ref. to 50% of waveform
9. COMMON MODE OUTPUT VOLTAGE: 1.2 V typical
10. RISE/FALL TIME: 0.55 nS max. ref. to 20% to 80% of waveform
11. DIFFERENTIAL OUTPUT VOLTAGE: 250 mV min. 350 mV typical, 450 mV max.
12. OUTPUT LOAD: 100 Ω differential
13. START UP TIME: 10 mS max.
14. ENABLE/DISABLE FUNCTION (Pad 1): Logic "1" enables outputs. Logic "0" disables outputs.
15. PHASE JITTER: 1 ps RMS max. (Integrated 12 kHz to 20 MHz)
16. PHASE NOISE (Typical): 10 Hz –70 dBc/Hz, 100 Hz –90 dBc/Hz, 1 kHz –120 dBc/Hz, 10 kHz –126 dBc/Hz, 100 kHz –133 dBc/Hz, 1 MHz –142 dBc/Hz, 10 MHz –148 dBc/Hz.

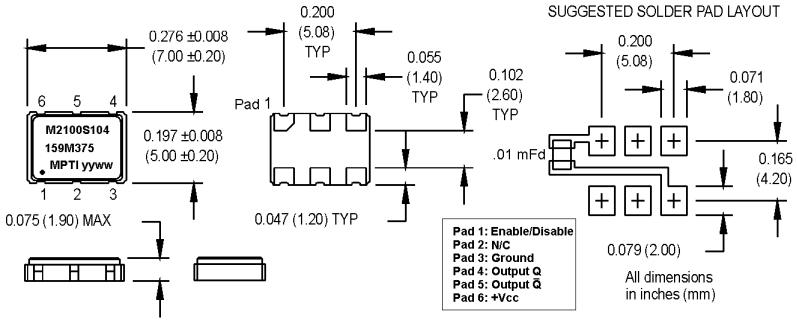
Figure 1



II. ENVIRONMENTAL/MECHANICAL REQUIREMENTS:

1. SHOCK: MIL-STD-202, Method 213, Condition C.
2. VIBRATION: MIL-STD-202, Methods 201 & 204.
3. HERMETICITY: 1X 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: 6- pad leadless ceramic 5 X 7 mm.
   RoHS compliant.

III. DIMENSIONS:



IV. DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
4/29/09	0	WNJ	Original release.
5/1/09	A	WNJ	Added Phase Jitter spec.