P.O. Box 630 100 Douglas Ave. Yankton, SD 57078 USA
Phone: 800-762-8800 or 605-665-9321 Fax: 605-665-1709
Website: www.mtronpti.com

SPECIFICATION FOR LVPECL SMT OSCILLATOR
MtronPTI P/N M2100S059

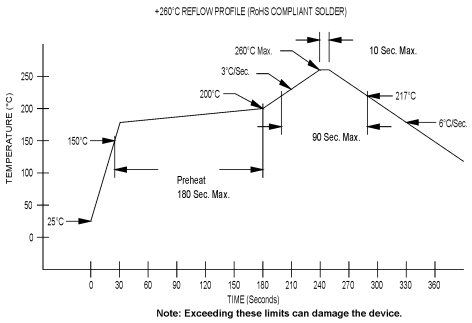
I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY OF OPERATION: 693.482990 MHz
2. OVERALL FREQUENCY STABILITY: ± 20 ppm max. (Includes initial tolerance, deviation over temperature, supply voltage, shock & vibration, and aging)
3. OPERATING TEMPERATURE RANGE: 0°C to +85°C
4. OPERATING VOLTAGE (Vcc): 3.3 V ± 0.165 V
5. OPERATING CURRENT: 105 mA max.
6. OUTPUT TYPE: Differential LVPECL Compatible
7. SYMMETRY: 45/55% ref. to 50% of waveform.
8. RISE/FALL TIME: 0.55 nS max. ref. to 20% to 80%
9. OUTPUT LOGIC LEVELS: V_{OL} = Vcc -1.63 V max. V_{OH} = Vcc – 1.02 V min.
10. OUTPUT LOAD: 50 ohms to Vcc-2 VDC
11. PHASE JITTER: 1.5 pS max. (Integrated from 12 kHz to 20 MHz)
12. ENABLE/DISABLE FUNCTION (Pad 1): Enabled outputs = Logic "1", Disabled outputs = Logic "0"
13. PHASE NOISE (Typical): 10 Hz –50 dBc/Hz, 100 Hz - 80 dBc/Hz, 1 kHz –100 dBc/Hz
    10 kHz – 118 dBc/Hz, 100 kHz – 121 dBc/Hz

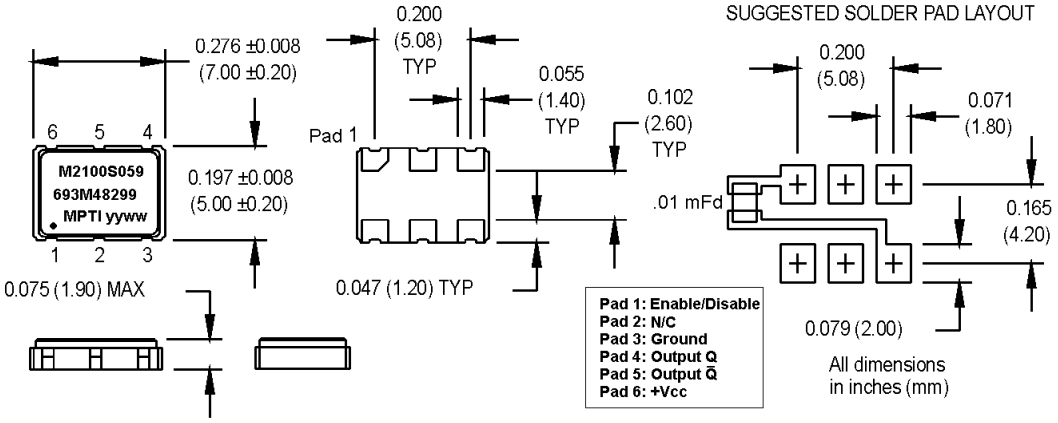
II. ENVIRONMENTAL & MECHANICAL REQUIREMENTS:

1. SHOCK: MIL-STD-202, Method 213, Condition C.
2. VIBRATION: MIL-STD-202, Methods 201 & 204.
3. SOLDERABILITY: Per EIAJ-STD-002
4. HERMETICITY: 1 X 10^{-8} atm cc/sec min.
5. MAXIMUM SOLDERING CONDITIONS: See figure 1
6. PACKAGE: 6- pad leadless ceramic. RoHS 6/6 compliant.

Figure 1



III: DIMENSIONS:



IV. DATA SHEET REVISION TABLE:

Date	Rev.	PCN	Details of Revision
8/17/07	0	N/A	Original release.