

SPECIFICATION FOR SMT LVPECL VCXO MtronPTI P/N M3100S071

I. GENERAL & ELECTRICAL REQUIREMENTS:

1. FREQUENCY OF OPERATION: 614.400000 MHz
2. FREQUENCY STABILITY VS. TEMPERATURE: ± 25 ppm typical.
3. FREQUENCY VS. AGING: ± 3 ppm first year max. ± 1 ppm/year max. thereafter.
4. OPERATING TEMPERATURE RANGE: -40°C to $+85^{\circ}\text{C}$
5. OPERATING VOLTAGE (V_{CC}): $3.3\text{ V} \pm 0.165\text{ V}$
6. OPERATING CURRENT (I_{CC}): 125 mA max.
7. OUTPUT TYPE: Complimentary LVPECL
8. SYMMETRY: 45/55% ref. at 50% of waveform.
9. RISE/FALL TIME: 0.5 nS max. ref. at 20% to 80%.
10. OUTPUT VOLTAGE LEVELS: $V_{OL} = V_{CC} - 1.63\text{ V}$ max. $V_{OH} = V_{CC} - 1.02\text{ V}$ min.
11. OUTPUT LOAD: 50 ohms to $V_{CC} - 2\text{ V}$.
12. PHASE JITTER: 0.5 pS RMS typical (12 kHz to 20 MHz)
13. SPURIOUS SUPPRESSION: -45 dBm typical.
14. PULLABILITY (APR): ± 50 ppm min.
15. TUNING SENSITIVITY (K_v): 90 ppm/V typical.
16. CONTROL VOLTAGE (Pin 1): 0.3 V to 3.0 V (+1.65 V for center frequency)
17. MODULATION BANDWIDTH (-3 dB): 20 kHz min.
18. INPUT IMPEDANCE (Pin 1): 500 K ohms min.
19. LINEARITY: 5 % max. with positive slope
20. ENABLE/DISABLE FUNCTION (Pad 2): Logic "1" enables output. Logic "0" disables outputs.

II. ENVIRONMENTAL & MECHANICAL REQUIREMENTS:

1. SHOCK: MIL-STD-202, Method 213, Condition C.
2. VIBRATION: MIL-STD-202, Methods 201 & 204.
3. HERMETICITY: 1×10^{-8} atm cc/sec min.
4. STORAGE TEMPERATURE: -45°C to $+90^{\circ}\text{C}$
5. SOLDERABILITY: Per EIAJ-STD-002
6. MAXIMUM SOLDERING CONDITIONS: See Figure 1.
7. PACKAGE: 6-pad leadless ceramic. RoHS compliant.

III. DIMENSIONS & PINOUT:

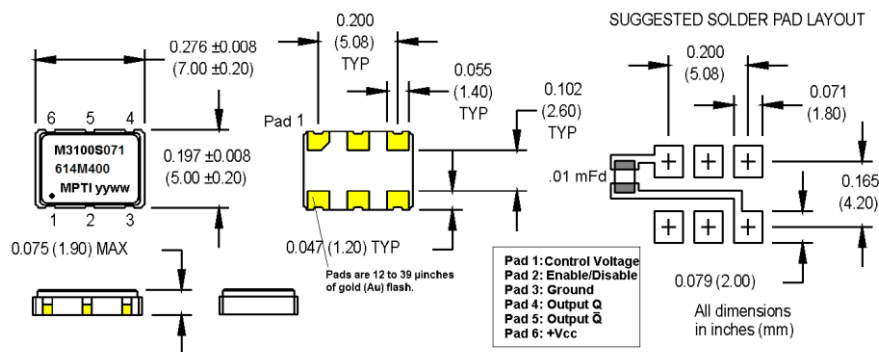
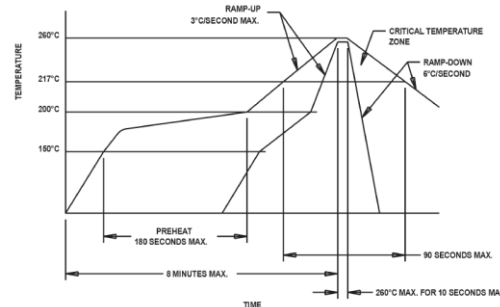


Figure 1



IV. DATA SHEET REVISION TABLE:

Date	Rev.	Orig.	Details of Revision
5/11/09	0	WNJ	Original release.