

1703 E. Highway 50 Yankton, SD 57078 USA Phone: 800-762-8800 or 605-665-9321 Fax: 605-665-1709 Website: www.mtronpti.com

## SPECIFICATION FOR SMT OSCILLATOR MtronPTI P/N M2015S066

### I. GENERAL & ELECTRICAL REQUIREMENTS:

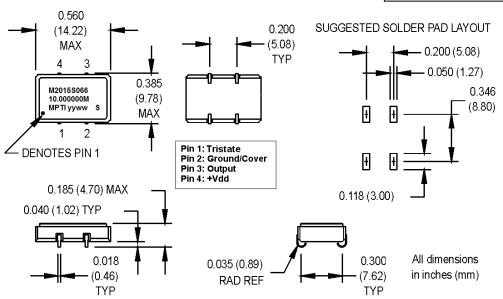
- 1. FREQUENCY OF OPERATION: 10.000000 MHz
- 2. FREQUENCY STABILITY OVER TEMPERATURE RANGE: ± 100 ppm
- 3. OPERATING TEMPERATURE RANGE: -55°C to +125°C
- 4. OPERATING SUPPLY VOLTAGE (Vdd): 5.0 V ± 0.5 V
- 5. OPERATING CURRENT: 85 mA max.
- 6. OUTPUT TYPE: HCMOS/TTL Compatible
- 7. SYMMETRY: 45/55% ref. to 1/2 Vdd and 1.4 V
- 8. RISE/FALL TIME: 7 nS max. ref. 10% to 90% and 0.5 V to 2.4 V.
- 9. OUTPUT LOGIC LEVELS: V<sub>OL</sub> = (CMOS) 10% Vdd max.V<sub>OH</sub> = 90% Vdd min.
  - (TTL) V<sub>OL</sub> = 0.5 V max. V<sub>OH</sub> = Vdd-0.5 min.
- 10. OUTPUT CURRENT LEVELS:  $I_{OL} = 16$  mA max.  $I_{OH} = -16$  mA max.
- 11. OUTPUT LOAD: 50 pF/10 TTL max.
- 12. TRISTATE FUNCTION (Pin 1): Logic "1", or floating output enabled.

Logic "0", output disabled to a high impedance state.

#### **II. ENVIRONMENTAL & MECHANICAL REQUIREMENTS:**

- 1. AVIONICS APPLICATION SCREENING: See Appendix 1.
- 2. SHOCK: Per MIL-STD-202, Method 213, Condition C.
- 3. VIBRATION: MIL-STD-202, Methods 201 & 204.
- 4. HERMETICITY: 1 X 10<sup>-8</sup> atm cc/sec min.
- 5. STORAGE TEMPERATURE: -55°C to +125°C
- 6. SOLDERABILITY: Per EIAJ-STD-002
- 7. MAXIMUM SOLDERING CONDITIONS: See Figure 1
- 8. PACKAGE: 4- J-lead ceramic.

#### **III. DIMENSIONS:**



#### Figure 1

250

200

150

100

50

150+10%

50%

25°C

(Time line ref. at 4ºC/Sec.)

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TEMPERATURE

240°C SUGGESTED SOLDER PROFILE

1 to 5 °C/Sec

60

TIME (Seconds)

30

90

120 150 180

2409C May

10 Sec. Max

20000



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### V. DATA SHEET REVISION TABLE:

Date	Rev.	PCN	Details of Revision
4/4/07	0	N/A	Original release.
1/11/12	А	N/A	Added special post screen marking requirement.