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## SPECIFICATION FOR M-TRON P/N M1004S051 Effective Date: October 18, 2004

## I. GENERAL & ELECTRICAL REQUIREMENTS

- 1. MODE OF OSCILLATION: Fundamental AT-Cut Crystal
- 2. FREQUENCY: 20.000000 MHz
- 3. FREQUENCY TOLERANCE @ +25°C: ± 30 ppm
- 4. FREQUENCY STABILITY OVER TEMPERATURE: ± 50 ppm
- 5. OPERATING TEMPERATURE RANGE: -40°C to +85°C
- 6. EFFECTIVE SERIES RESISTANCE (ESR):  $50\Omega$  max.
- 7. LOAD CAPACITANCE: 15 pF
- 8. SHUNT CAPACITANCE: 7.0 pF max.
- 9. AGING:  $\pm$  5 ppm/yr. max.
- 10. DRIVE LEVEL: 500 µW max.

## II. ENVIRONMENTAL/MECHANICAL REQUIREMENTS

- 1. SHOCK: Per MIL-STD-202, Method 213, Condition C
- 2. VIBRATION: Per MIL-STD-202, Method 201 & 204
- 3. HERMETICITY: 1X 10 -8 atm cc/sec min.
- 4. SOLDERABILITY: Per EIA J-STD-002
- 5. PACKAGE: HC-49U/S (ATS-49 type)

## **DIMENSIONS**

