

SPECIFICATION FOR HIGH TEMPERATURE SMT CRYSTAL MtronPTI P/N M1001S096

I. GENERAL & ELECTRICAL REQUIREMENTS:

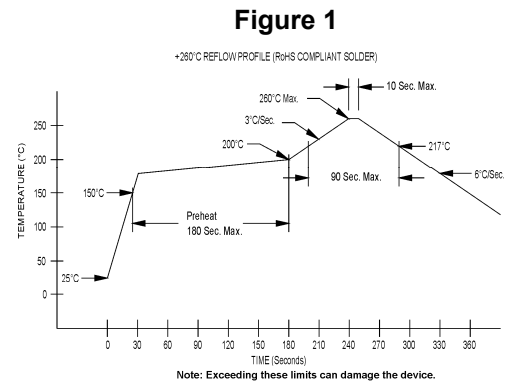
1. MODE OF OSCILLATION: Fundamental AT-Cut Crystal
2. FREQUENCY OF OPERATION: 24.000000 MHz
3. FREQUENCY TOLERANCE @ +25°C: ±30 ppm max.
4. FREQUENCY STABILITY OVER TEMPERATURE: ± 50 ppm max.
5. OPERATING TEMPERATURE RANGE: -40°C to +125°C
6. EFFECTIVE SERIES RESISTANCE (ESR): 20 ohms max.
7. LOAD CAPACITANCE: 12 pF
8. SHUNT CAPACITANCE: 6.0 pF max.
9. AGING: ± 5 ppm/yr. max. at +25°C
10. DRIVE LEVEL: 1 mW max. 50 µW min.

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: 1×10^{-8} atm cc/sec min.
4. SOLDERABILITY: Per EIAJ-STD-002
5. MAXIMUM SOLDERING CONDITIONS: See figure 1.
6. PACKAGE: HC-49S-SMD. RoHS compliant.

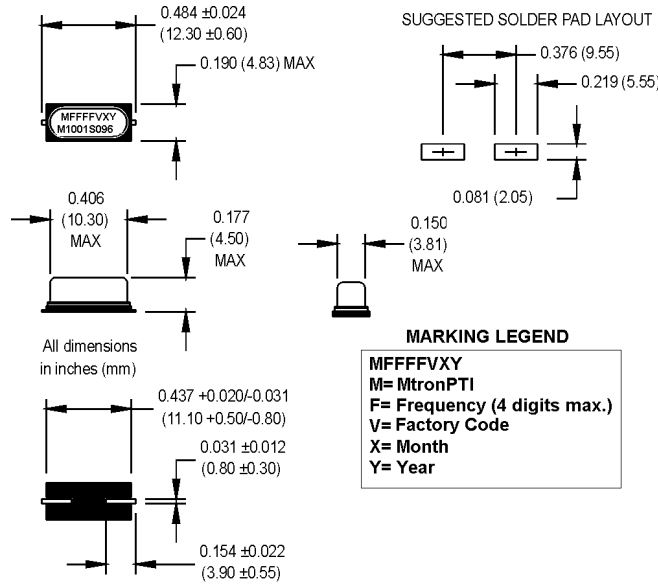
III. ELECTRICAL TESTING :

1. The units are 100% tested at room temperature at the following drive levels: 1 µW, 5 µW, 10 µW, 50 µW, 100 µW, and 500 µW. The resistance specification for this testing is as shown in Section I, Item 6. The units are also 100% tested at room temperature for the frequency tolerance stated in Section I, Item 3., and the shunt capacitance specification in Section I, Item 8.
2. The units are 100% tested at a drive level of 50 µW for frequency deviation, and ESR, over the operating temperature range in 10°C, or smaller, steps shown in Section I, Item 5. The specifications for this test are as shown in Section I, Items 4 and 6.



SPECIFICATION FOR HIGH TEMPERATURE SMT CRYSTAL MtronPTI P/N M1001S096

IV. DIMENSIONS:



V. DATA SHEET REVISION TABLE:

Rev	Date	Description