

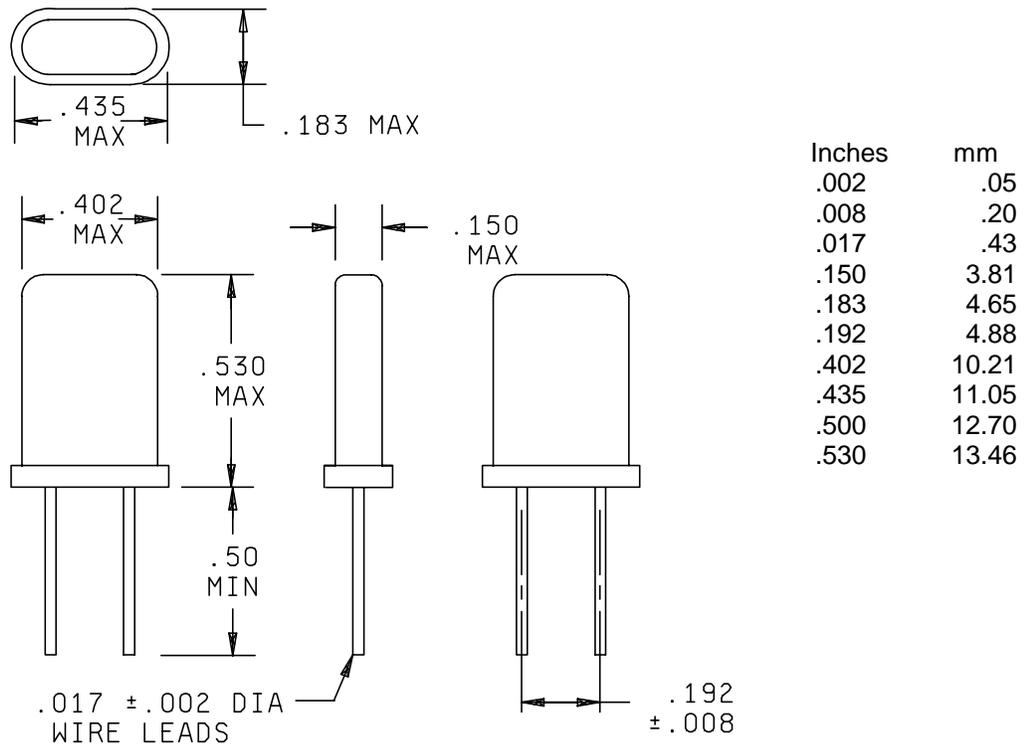
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR111/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 17 MHz to 62 MHz; third mechanical overtone; noncontrolled; series resonance.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR111/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 17 MHz to 62 MHz, inclusive.

Capacitance, shunt: 4 pF, maximum.

Mode of oscillation: Third mechanical overtone.

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Reference temperature: $+30^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

Operating temperature range (noncontrolled): -55°C to $+105^{\circ}\text{C}$, inclusive.

Frequency tolerances:

Operating temperature range: ± 50 ppm.

Reference temperature: ± 15 ppm.

Equivalent resistance: 40 ohms, maximum.

Shock (specified pulse): Method 213, MIL-STD-202, with the following exceptions: 18 impact shocks of 5 gravity units each, time duration 11 milliseconds ± 1 millisecond. Three shocks shall be applied in each direction along each of three mutually perpendicular planes.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 15 percent or 2 ohms, whichever is greater.

Vibration: Method 204, MIL-STD-202, test condition A; 0.03 inch double amplitude or 5 gravity units, whichever is less.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 15 percent or 2 ohms, whichever is greater.

Thermal shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 15 percent or 2 ohms, whichever is greater.

Aging:

Frequency change permitted: ± 5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

MIL-PRF-3098/87E

Custodians:

Army - CR
Navy - EC
Air Force -85

Review activity:

Air Force - 17

Preparing activity:

Army - CR

Agent:

DLA - CC

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