

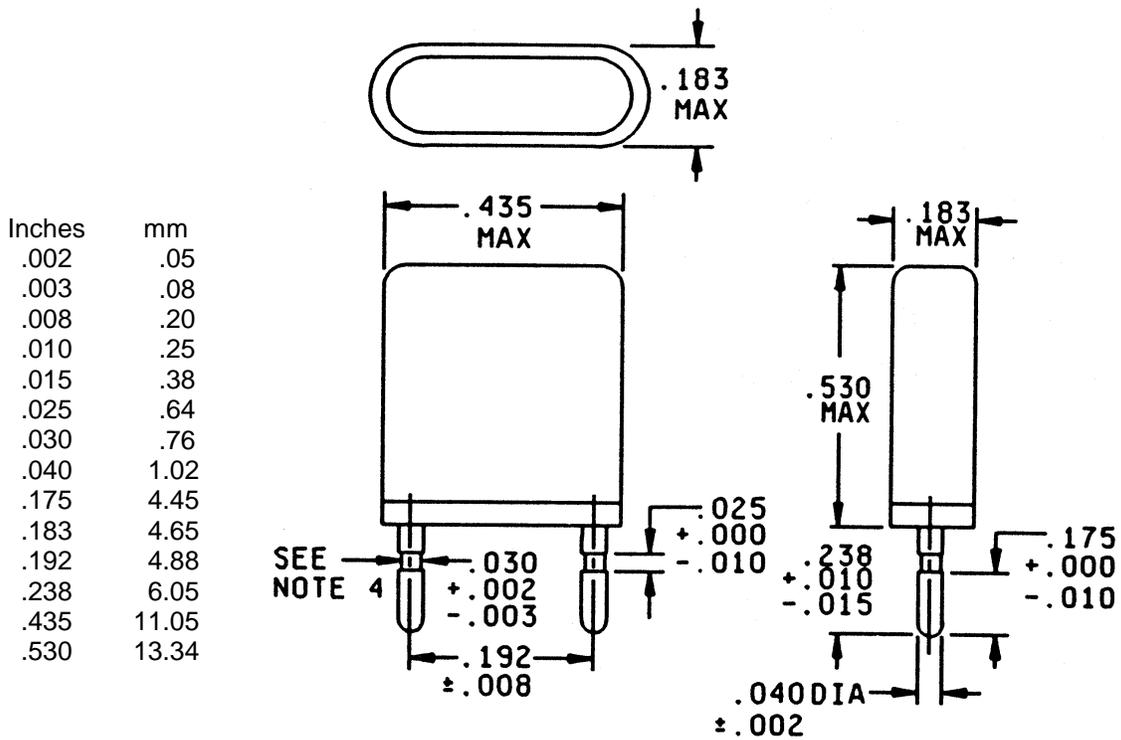
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR73/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 61 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.
4. The pin undercut may be omitted.

FIGURE 1. Crystal unit - CR73/U.

MIL-PRF-3098/54E

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 17.0 MHz to 61.0 MHz, inclusive.

Frequency tolerances: ± 30 parts per million (ppm).

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Equivalent resistance: 17 MHz to 30.0 MHz - 40 ohms, maximum and 10 ohms, minimum.
30.0+ MHz to 61 MHz - 30 ohms, maximum and 5 ohms, minimum.

Unwanted modes: Method II, twice main mode resistance.

Mode of oscillation: Third mechanical overtone.

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

Capacitance, shunt: 17 MHz to 30 MHz - $3.5\text{ pF} \pm 0.5\text{ pF}$.
30.0+ MHz to 61.0 MHz - $4.0\text{ pF} \pm 0.5\text{ pF}$.

Shock (specified pulse):

Frequency change permitted: ± 3 ppm.

Equivalent resistance change permitted: ± 15 percent.

Thermal shock:

Frequency change permitted: ± 3 ppm.

Equivalent resistance change permitted: ± 15 percent.

Vibration: Method 204 of MIL-STD-202, test condition A.

Frequency change permitted: ± 3 ppm.

Equivalent resistance change permitted: ± 15 percent.

Aging:

Frequency change permitted: ± 3 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-3098/54E

Custodians:

Army - CR
Navy - EC
Air force - 85

Review activities:

Army - AR, MI
Navy - AS, MC, SH
Air Force - 17, 19

Preparing activity:

Army - CR

Agent:

DLA - CC

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