

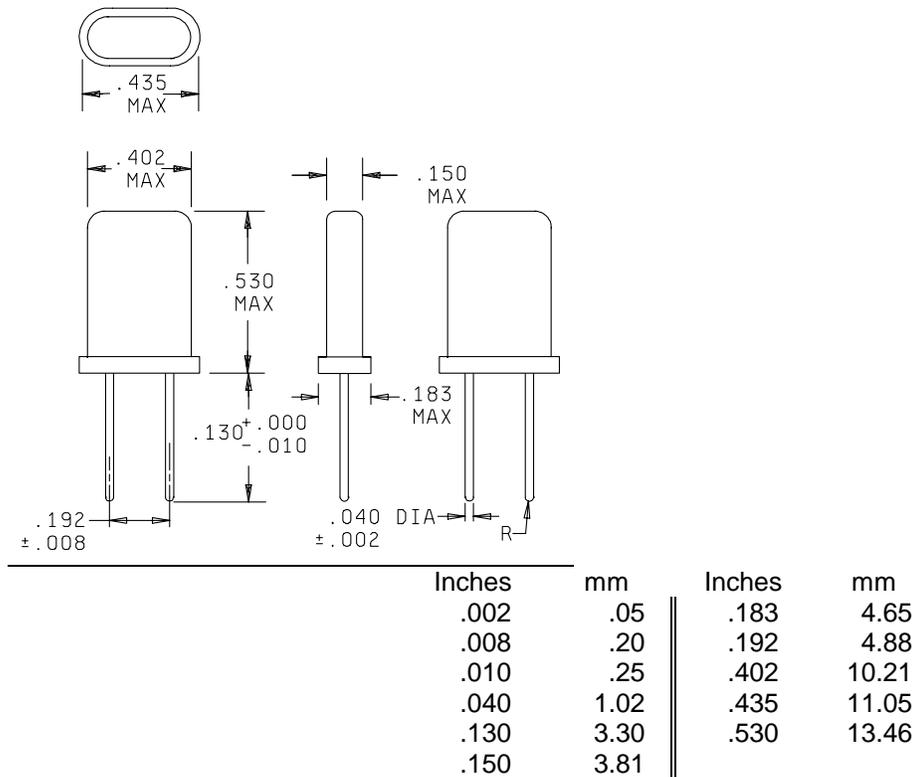
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR114/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: 2.9 MHz to 3.85 MHz; fundamental; 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 - CR114/U.

MIL-PRF-3098/90B

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 2.9 MHz to 3.85 MHz, inclusive.

Frequency tolerance:

Operating temperature range : ± 0.005 percent.

Mode of oscillation: Fundamental.

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

Capacitance, load: 32.0 pF ± 0.05 pF.

Resonance: Series.

Rated drive level: 1.0 mW, maximum.

Calibration values:

Resistance: 100 ohms.

Crystal current: 3.2 mA.

Capacitance, shunt: 7 pF, maximum.

Equivalent resistance: 300 ohms, maximum.

Shock: Method 202, MIL-STD-202.

Frequency change permitted: ± 0.0005 percent.

Equivalent-resistance change permitted: ± 15 percent.

Vibration: Method 204, MIL-STD-202, test condition A; 0.10 inch double amplitude or 5 gravity units, whichever is less.

Frequency change permitted: ± 0.0005 percent.

Equivalent-resistance change permitted: ± 15 percent.

Unwanted modes: Minimum unwanted mode effective resistance shall be at least twice that of the main mode, or greater, over the operating temperature range -55°C to $+105^{\circ}\text{C}$.

Aging:

Frequency change permitted: ± 0.0005 percent.

Reference documents. In addition to MIL-PRF-3098, this document references the following:

MIL-STD-202

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-3098/90B

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5955-0755)

Review activities:

Air Force - 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.