

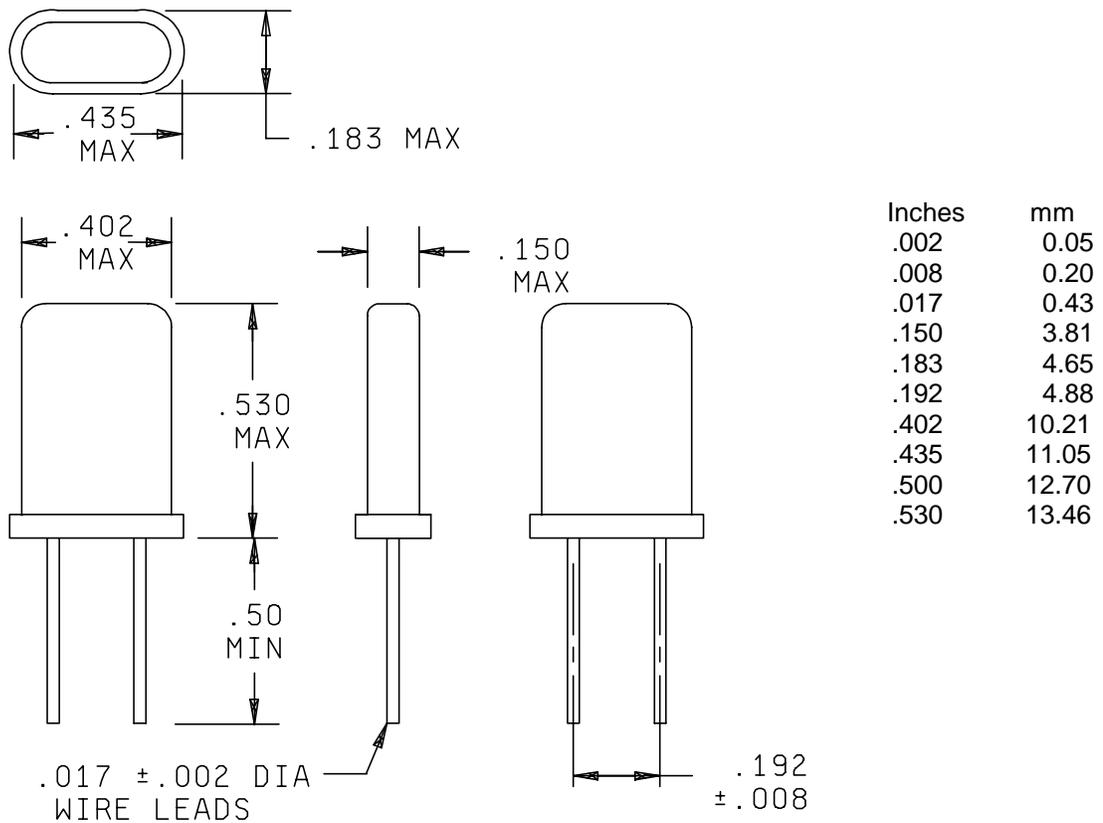
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR122/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: 50 MHz to 125 MHz; fifth mechanical overtone; controlled; 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 - CR122/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 50 MHz to 125 MHz, inclusive.

Capacitance, shunt: 7 pF, maximum.

Frequency tolerances:

Operating temperature range:  $\pm 10$  ppm.

Reference temperature:  $\pm 10$  ppm.

Room temperature:  $\pm 80$  ppm.

Frequency stability:  $\pm 5$  ppm.

Mode of oscillation: Fifth mechanical overtone.

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Reference temperature:  $+85^{\circ}\text{C} \pm 1^{\circ}\text{C}$ .

Temperature ranges:

Operating (controlled):  $+80^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$ , inclusive.

Operable:  $+55^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ , inclusive.

Equivalent resistance:	<u>MHz</u>	<u>Ohms, max</u>
	50 to 100	50
	100 to 125	60

Shock (specified pulse):

Frequency change permitted:  $\pm 5$  ppm.

Equivalent resistance change permitted:  $\pm 10$  percent

Vibration: Method 201, MIL-STD-202.

Frequency change permitted:  $\pm 5$  ppm.

Equivalent resistance change permitted:  $\pm 10$  percent.

Thermal shock:  $\pm 10$  percent.

Aging:

Frequency change permitted:  $\pm 5$  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-3098/99C

Custodians:

Army - CR  
Navy - EC  
Air Force -85

Review activities:

Air Force - 17, 99

Preparing activity:

Army - CR

Agent:

DLA - CC

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