

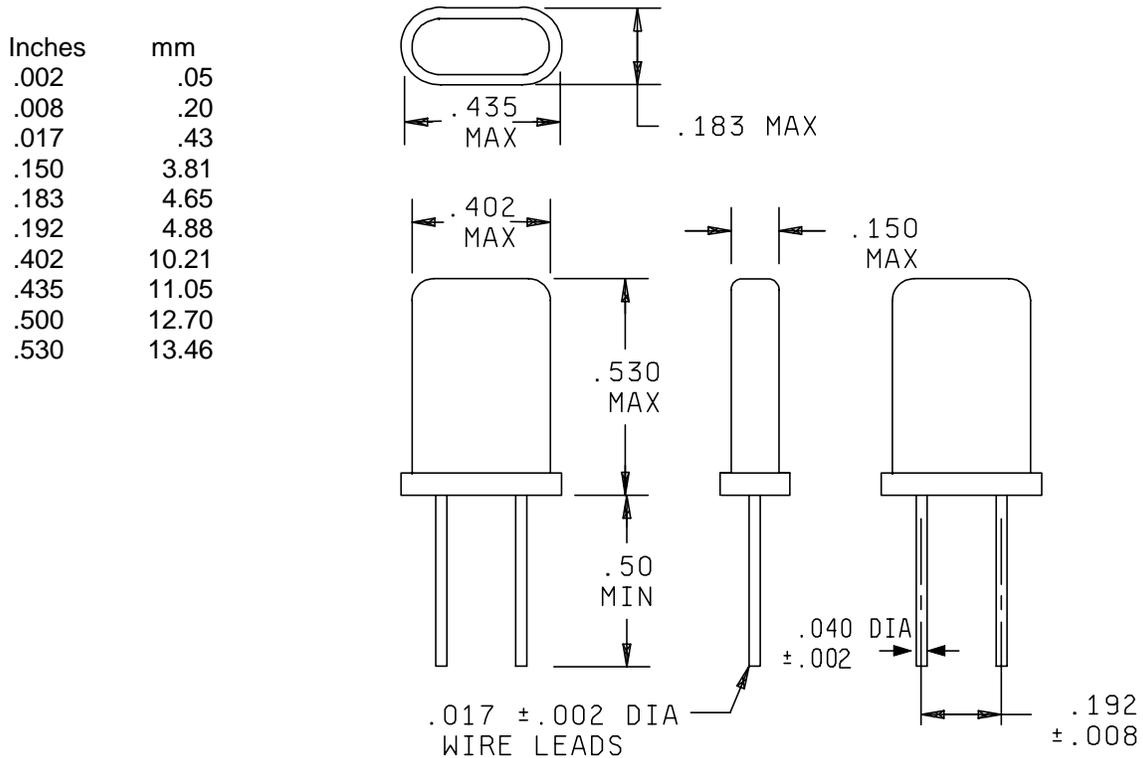
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR108/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 93 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 - CR108/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1. ^{1/}

Frequency range: 50 MHz to 93 MHz, inclusive.

Capacitance, shunt: 5.5 pF, maximum.

Frequency stability: ± 2.5 ppm.

Mode of oscillation: Fifth mechanical overtone.

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

Frequency tolerance: ± 10 ppm (including frequency stability).

Equivalent resistance: 50 ohms, maximum.

Operable temperature range: -55°C to $+80^{\circ}\text{C}$ and $+90^{\circ}\text{C}$ to $+105^{\circ}\text{C}$.

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

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

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

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Thermal shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 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.

^{1/} These crystal units were previously fabricated using Air Force Technical Order 12-1-20 and/or Collins drawing numbers 289-2844 through 2858-00.

MIL-PRF-3098/84D

Custodians:
Army - CR
Air Force -85

Review activity:
Air Force - 99

Preparing activity:
Army - CR

Agent:
DLA - CC

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