

INCH-POUND  
MIL-PRF-3098/104D  
27 August 1997  


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SUPERSEDING  
MIL-C-3098/104C  
5 May 1993

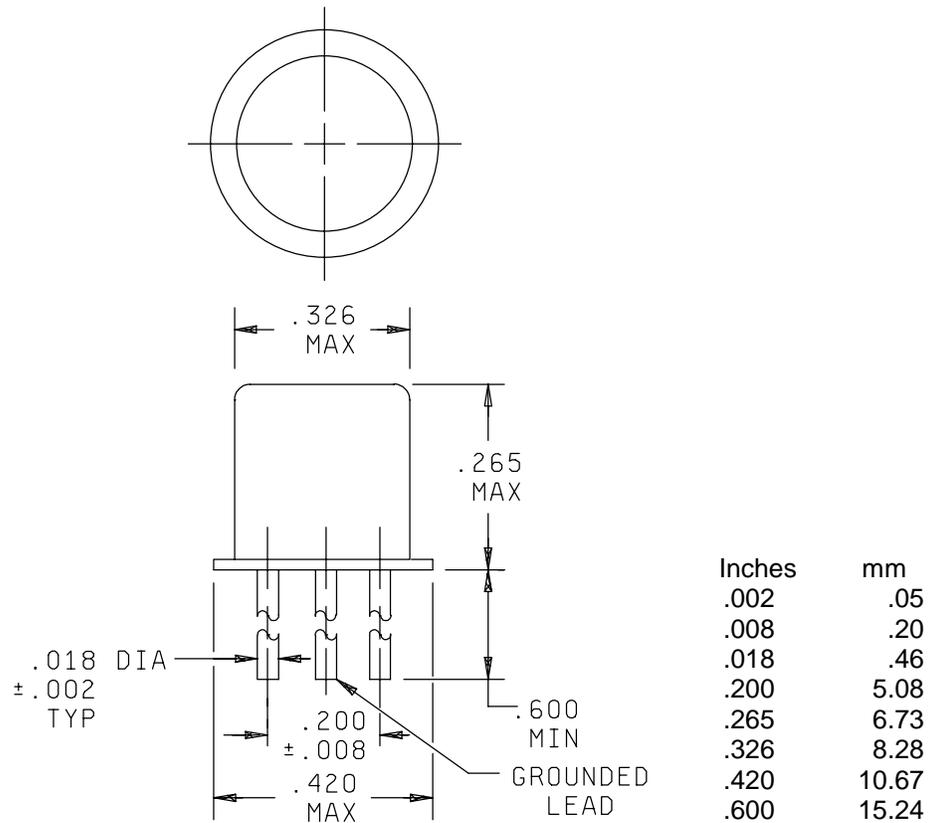
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR102/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 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 - CR102/U.

MIL-C-3098/104D

REQUIREMENT:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 50 MHz to 125 MHz, inclusive.

Frequency tolerance:  $\pm 25$  ppm.

Equivalent resistance: 50 MHz to 90 MHz: 50 ohms, maximum.

90 MHz to 125 MHz: 60 ohms, maximum.

Mode of oscillation: Fifth overtone.

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

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Capacitance, shunt: 7 pF, maximum.

Shock (specified pulse):

Frequency change permitted:  $\pm 5$  ppm.

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

Thermal shock:

Frequency change permitted:  $\pm 5$  ppm.

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

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

Frequency change permitted:  $\pm 5$  ppm.

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

Custodians:

Army - CR

Navy - EC

Air Force -85

Review activities:

Army - AR, MI, SM

Navy - AS, CG, MC, OS, SH

Air Force - 17, 19, 99

Preparing activity:

Army - CR

Agent:

DLA - CC

(Project 5955-0697-68)