

INCH POUND

MIL-PRF-3098/58G

27 August 1997

SUPERSEDING

MIL-C-3098/58F

10 April 1995

PERFORMANCE SPECIFICATION SHEET

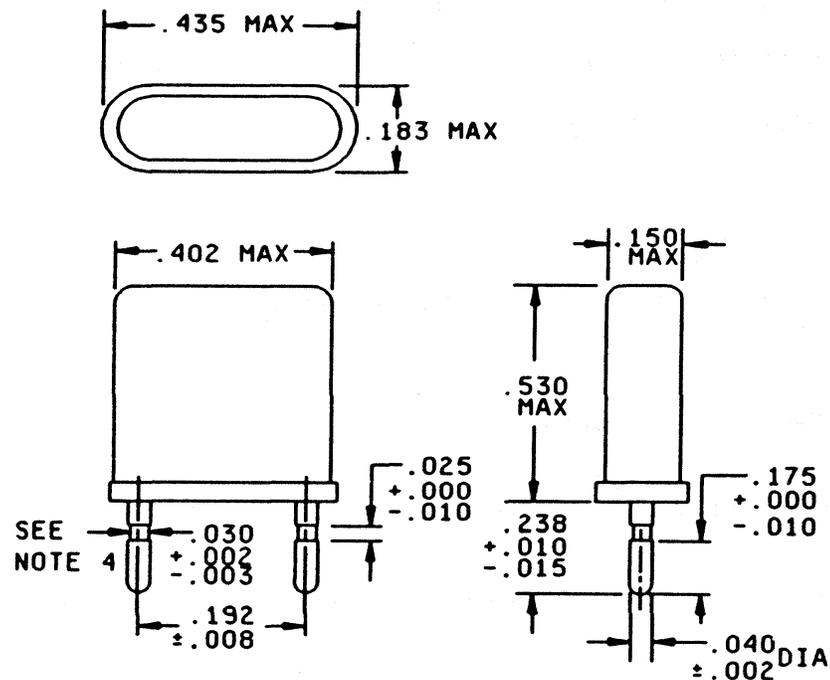
CRYSTAL UNIT, QUARTZ, CR81/U

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 65 MHz; third mechanical overtone; noncontrolled; series resonance.

Inches	mm
.002	.05
.003	.08
.008	.20
.010	.25
.015	.38
.025	.64
.030	.76
.040	1.02
.150	3.81
.175	4.45
.183	4.65
.192	4.88
.238	6.05
.402	10.21
.435	11.05
.530	13.46



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be in accordance with MIL-PRF-3098.
4. Pin undercut may be omitted.

FIGURE 1. Crystal unit - CR81/U.

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REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 17.0 MHz to 65.0 MHz, inclusive.

Capacitance, shunt: 7.0 pF, maximum.

Frequency tolerances (operating temperature range): ± 50 parts per million (ppm).

Equivalent resistance: 40 ohms, maximum.

Mode of oscillation: Third mechanical overtone.

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

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Shock (specified pulse):

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Vibration: Method 204 of 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: ± 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.

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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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