INCH-POUND
MIL-PRF-3098/8F
19 December 2003
SUPERSEDING
MIL-C-3098/8E
27 August 1997

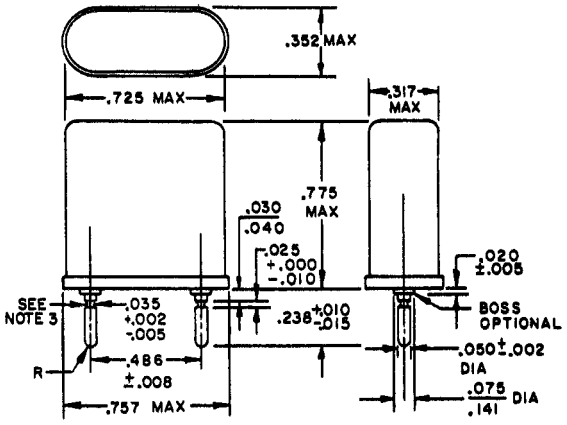
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR26/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: 200 kHz to 555 kHz; fundamental; controlled; series resonance.



Inches	mm	Inches	mm
.002	.05	.050	1.27
.005	.13	.075	1.91
.008	.20	.141	3.58
.010	.25	.238	6.05
.015	.38	.317	8.05
.020	.51	.352	8.94
.025	.64	.486	12.34
.030	.76	.725	18.42
.035	.89	.757	19.23
.040	1.02	.775	19.69

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The pin undercut may be omitted.
4. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR26/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 200 kHz to 555 kHz, inclusive.

Frequency tolerance, operating temperature range: ±20 parts per million (ppm).

Frequency stability: ±5 ppm.

Equivalent resistance: See table II.

Mode of oscillation: Fundamental.

Reference temperature: +75°C ±1°C

Temperature ranges:

Operating (controlled): +70°C to +80°C, inclusive.

Operable: -40°C to +70°C, inclusive.

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Shock (specified pulse):

Frequency change permitted: ±5 ppm.

Equivalent resistance change permitted: ±15 percent.

Vibration: Method 201 of MIL-STD-202.

Frequency change permitted: ±5 ppm.

Equivalent resistance change permitted: ±15 percent.

Temperature run:

Frequency change permitted: ±10 ppm.

Equivalent resistance change permitted: ±15 percent.

Bond strength: See table I.

TABLE I. Bond strength.

Frequency range, inclusive (kHz)	Grams, minimum
200 to 250	700
250+ to 320	500
320+ to 370	400
370+ to 435	300
435+ to 555	250

TABLE II. Equivalent resistance.

Frequency range, inclusive	Maximum resistance
kHz	Ohms
200 to 225	2,500
225+ to 265	3,000
265+ to 290	3,500
290+ to 330	4,000
330+ to 370	4,500
370+ to 410	5,000
410+ to 425	5,500
425+ to 460	6,500
460+ to 555	7,500

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 - 11
DLA - CC

Review activities:
Army - AR, MI
Navy - AS, MC, SH
Air Force - 19

Preparing activity:
Army - CR

Agent:
DLA - CC

(Project 5955-0749-03)