

PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR142/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 sheet and [MIL-PRF-3098](#).

Pertinent characteristics: 833.333 kHz; fundamental mode; controlled; antiresonance.

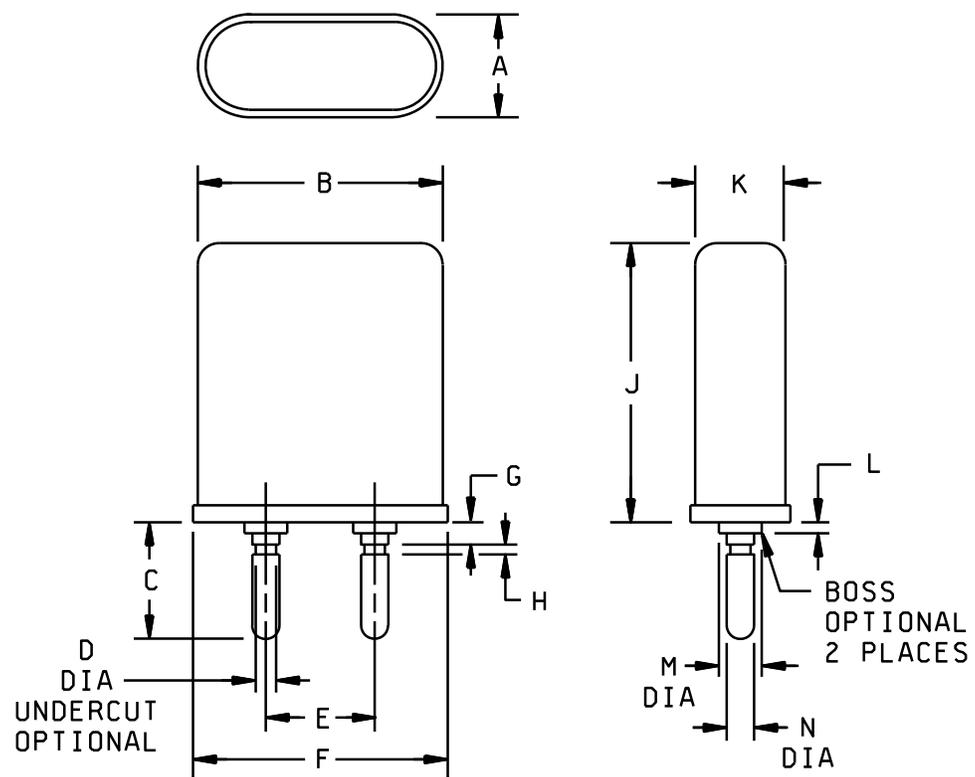


FIGURE 1. Crystal unit - CR142/U.

Ltr	Inches		mm	
	Min	Max	Min	Max
A	---	.352	---	8.94
B	---	.725	---	18.42
C	.223	.248	5.66	6.30
D	.030	.037	0.76	0.94
E	.460	.476	11.68	12.09
F	---	.757	---	19.23
G	.030	.040	0.76	1.02
H	.015	.025	0.38	0.64
J	---	.775	---	19.68
K	---	.317	---	8.05
L	.015	.025	0.38	0.64
M	.075	.141	1.90	3.58
N	.048	.052	1.22	1.32

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 - CR142/U - Continued.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency: 833.333 kHz.

Capacitance, shunt: 7.0 pF, maximum.

Mode of oscillation: Fundamental.

Rated drive level: 1.0 mW, maximum.

Calibration values:

Equivalent-resistance: Zero ohms.

Crystal current: Set crystal current control at extreme counterclockwise, minimum.

Antiresonance, load capacitance: 32.0 pF \pm 0.2 pF.

Reference temperature: 75°C \pm 1°C.

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

Frequency tolerance: \pm 0.001 percent.

Equivalent resistance: 275 ohms, maximum.

Frequency stability: \pm 0.0005 percent.

Operable temperature range: -55°C to +70°C and +80°C to +90°C, inclusive.

Shock:

Frequency change permitted: \pm 0.0005 percent.

Equivalent resistance: \pm 15 percent.

Vibration: [Method 201, MIL-STD-202](#).

Frequency change permitted: \pm 0.0005 percent.

Equivalent resistance change permitted: \pm 15 percent.

Temperature cycling:

Frequency change permitted: \pm 10 Hz.

Equivalent resistance change permitted: \pm 20 percent.

Aging:

Frequency change permitted: \pm 0.0005 percent.

Reference documents. In addition to [MIL-PRF-3098](#), this document references the following:

[MIL-STD-202](#)

The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - CR
Navy - EC
Air Force - 99
DLA - CC

Preparing activity:

DLA - CC

(Project 5955-2009-038)

Review activities:

Air Force - 19, 84

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil/>.