INCH-POUND
MIL-PRF-3098/114D
7 August 2009
SUPERSEDING
MIL-PRF-3098/114C
17 May 2004

PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR135/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: 10 MHz to 12 MHz; fundamental; controlled; antiresonance.

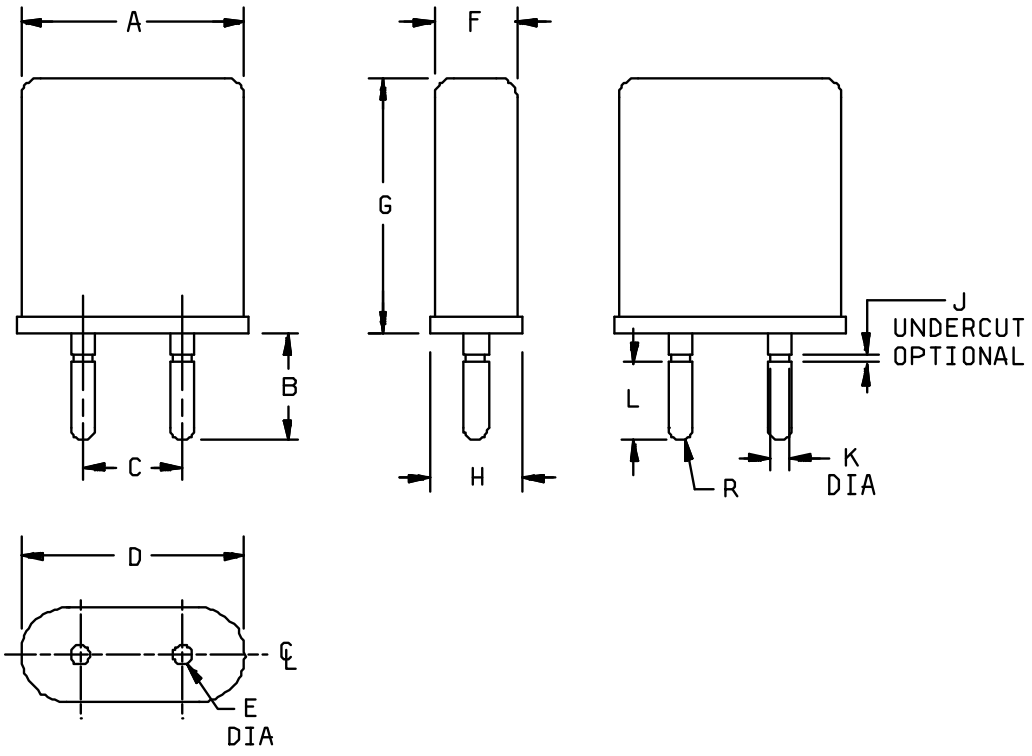

FIGURE 1. Crystal unit - CR135/U.

Ltr	Inches		mm	
	Min	Max	Min	Max
A	---	.402	---	10.21
B	.223	.248	5.66	6.30
C	.184	.200	4.67	5.08
D	---	.435	---	11.05
E	.038	.042	0.96	1.07
F	---	.150	---	3.81
G	---	.530	---	13.46
H	---	.183	---	4.65
J	.015	.025	0.38	0.63
K	.027	.032	0.68	0.81
L	.165	.175	4.19	4.44

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 - CR135/U - Continued.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 10 MHz to 12 MHz, inclusive.

Capacitance, shunt: 7.0 pF, maximum.

Mode of oscillation: Fundamental.

Rated drive level: 1.0 mW, maximum.

Calibration values:

Equivalent resistance: 11 ohms.

Crystal current: 15 mA.

Antiresonance, load capacitance: 32.0 pF ±0.5 pF.

Reference temperature: +85°C ±2°C.

Operating temperature range: +80°C to +90°C, inclusive.

Frequency tolerance: ±0.002 percent.

Equivalent resistance: 22 ohms, maximum.

Frequency stability: ±0.0001 percent.

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

Shock:

Frequency change permitted: 4 Hz, maximum.

Equivalent resistance: ±10 percent.

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

Frequency change permitted: 4 Hz, maximum.

Equivalent resistance change permitted: ±10 percent.

Temperature cycling:

Frequency: Normal frequency ±0.002 percent.

Equivalent resistance: 22 ohms, maximum.

Aging:

Frequency change permitted: ±0.0005 percent.

Reference documents. In addition to MIL-PRF-3098, this document references the following:

MIL-STD-202

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(Project 5955-2009-037)

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