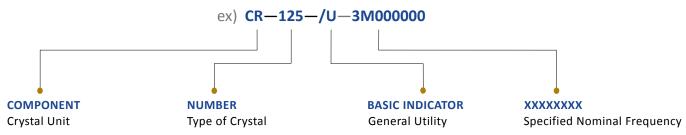


## CR125/U-Series Specifications



## 0.757L x 0.352W x 0.775H (in)

PDI *MIL-PRF-3098* Qualified Product List (QPL) crystals are available in both standard or custom frequencies to provide precision timing in a resistance welded HC-48 package.



Parameter		Frequency Range	Units MHz
		2.250000 to 3.050000	
Mode of Oscillation		Fundamental	
Equivalent Series Resistance		See Table 1	
Operating Temperature Range	noncontrolled	-55 to +105	°C
Frequency Tolerance (Inclusive)	Operating Temperature Range	±0.005	%
Drive Level	Max	1.0	mW
Load Capacitance (CL)	±0.05	32.0	pF
Seal Method	Resistance Weld		
Shunt Capacitance (C0)	Max	7.0	pF

Environmental Specifications			Units
Shock	Frequency Change Permitted	±0.0005	%
	Equivalent Resistance Change Permitted	±15% or ±2Ω, whichever is greater	
Vibration	Frequency Change Permitted	±0.0005	%
MIL-STD-202, Method 204, Condition B (Amplitude to produce 5 gravity units, max)	Equivalent Resistance Change Permitted	±15% or ±2Ω, whichever is greater	
Temperature Cycling		±0.001	%
Aging (Aging Temperature: 105°C for 200 days)	Frequency Change Permitted	±0.002	%

(Table 1) Equivalent Series Resistance			
Frequency Range (Inclusive)	Max Resistance	Units	
2.25 MHz – 2.999999 MHz	320		
3.00 MHz – 3.050000 MHz	175	Ω	

The product described in this spec. consist of this specification and  $\mbox{\it MIL-PRF-3098}.$ 

Decimal XXX =  $\pm$  .008, XX =  $\pm$  .020 Metric [XXX =  $\pm$  .20], [XX =  $\pm$  .50]

REV: NA	SIZE: A	CAGE: A	1 of 3
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MIL-PRF-3098 w/Amendment 1 Table VI, Group B Inspection for Product Level B Crystals			
Subgroup I 1/	Requirement Paragraph	Method Paragraph	
Solderability	3.7	4.10.3	
Resistance to solvents (4 sample units)	3.8	4.10.4	
Shock (Specified pulse)	3.17	4.10.13	
Vibration	3.19.1	4.10.15.1	
Thermal shock	3.23	4.10.19.1	
Seal	3.24	4.10.26	
Salt atmosphere (Corrosion)	3.27	4.10.21	
Moisture resistance	3.28	4.10.22	
Terminal strength 2/	3.30	4.10.23	
Visual and mechanical examination (Internal) 2/	3.5, 3.6, 3.35	4.10.2.2	
Bond strength (When specified) 2/	3.31	4.10.24	
Subgroup II 3/			
Insulation resistance	3.14	4.10.10	
Aging	3.29	4.10.27.1	

- 1/ If the contractor can demonstrate that any of these tests have been performed for three consecutive periods with zero failures, the frequency of this test, with the approval of the qualifying activity, can be performed every 36 months. If the design, material, construction, or processing of the crystal units change, or if there are any quality problems or failures, the qualifying activity may require resumption of the original test frequency.
- 2/ Only two units are required. These two samples units shall be subjected to terminal strength, visual and mechanical (Internal), and bond strength (When specified see 3.1).
- 3/ If the contractor can demonstrate that any of these tests have been performed for six consecutive periods with zero failures, the frequency of this test, with the approval of the qualifying activity, can be performed every 36 months. If the design, material, construction, or processing of the crystal units change, or if there are any quality problems or failures, the qualifying activity may require resumption of the original test frequency.

## PACKAGE DIMENSIONS

