

Quartz Crystal

Frequency Range: 10MHz to 50MHz (fund)
20MHz to 100MHz (3rd O/T)
50MHz to 200MHz (5th O/T)

Frequency Tolerance: $\pm 10\text{ppm}$ to $\pm 100\text{ppm}$

Frequency Stability: $\pm 10\text{ppm}$ to $\pm 100\text{ppm}$

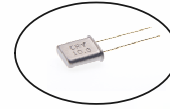
Temperature Range: 0°C to 70°C
(Option) -20°C to 70°C
(Option) -40°C to 85°C
(Option) -55°C to 120°C

Storage:

Shunt Capacitance: 7.0pF Max

Drive Level: 100 uW Typical

ESR: see table 1

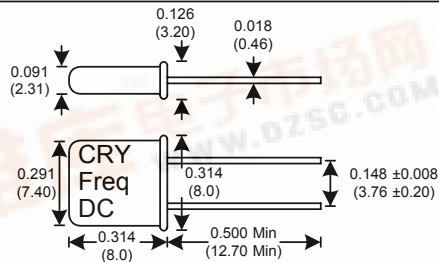


Lead Free
RoHS
Compliant

Designed to provide traditional crystal design flexibility of the HC49 in a smaller UM-1 package. Custom lead forming available for SMD applications.

****Custom Designs Available**

Aging: <3ppm 1st/yr Max



Resistance at series resonance	
Freq. (MHz)	Max ESR
10.0 - 18.0	60
18.1 - 50.0	40
20.0 - 100.0	60
50.0 - 200.0	100

Table 1

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

Build Your Own P/N

CRM X X X X - Freq

Frequency Tolerance at 25°C

- 1 ± 10 ppm
- 2 ± 15 ppm
- 3 ± 20 ppm
- 4 ± 25 ppm
- 5 ± 30 ppm
- 6 ± 50 ppm
- 7 ± 100 ppm

Frequency Stability over Temp Range

A ± 10 ppm (0 to 70°C)	J $\pm 30\text{ppm}$ (-20 to 70°C)
B ± 15 ppm (0 to 70°C)	K ± 50 ppm (-20 to 70°C)
C ± 20 ppm (0 to 70°C)	L ± 100 ppm (-20 to 70°C)
D ± 25 ppm (0 to 70°C)	M ± 20 ppm (-40 to 85°C)
E ± 30 ppm (0 to 70°C)	N ± 25 ppm (-40 to 85°C)
F ± 50 ppm (0 to 70°C)	O ± 30 ppm (-40 to 85°C)
G ± 100 ppm (0 to 70°C)	P ± 50 ppm (-40 to 85°C)
H ± 15 ppm (-20 to 70°C)	Q ± 100 ppm (-40 to 85°C)
I ± 20 ppm (-20 to 70°C)	

Load Capacitance

- 1 Series
- 2 14 pF
- 3 16 pF
- 4 18 pF
- 5 20 pF
- 6 22 pF
- 7 25 pF
- 8 32 pF

Mode

- 1 Fundamental 10-50 MHz
- 3 3rd Overtone 20-100 MHz
- 5 5th Overtone 50-200 MHz

Example:

CRM4F51-20.000 = $\pm 25\text{ppm}$ at 25°C , $\pm 50\text{ppm}$ 0 to 70°C , 20pF Load Cap, Fundamental, 20.000MHz

Specifications subject to change without notice.

TD-021014 Rev. B