

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 $\pm 100\text{ppm}$

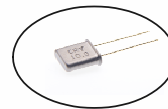
Temperature Range: 0°C to 70°C
(Option) -20°C to 70°C
(Option) -40°C to 85°C
(Option) -55°C to 120°C

Storage:

Shunt Capacitance: 7.0pF Max

Drive Level: 100 uW Typical

ESR: see table 1

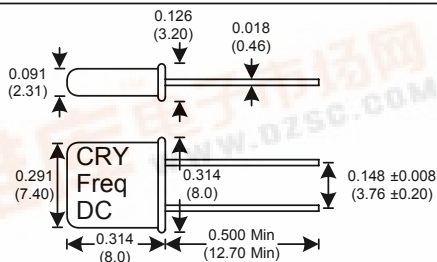


Lead Free
RoHS
Compliant

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

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

Mode

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

Specifications subject to change without notice.

TD-021014 Rev. B