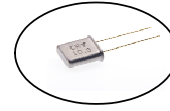


CRMxx Model
UM-1 Leaded Crystal

Quartz Crystal



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

Frequency Tolerance: ±10ppm to ±100ppm

Frequency Stability: ±10ppm to ±100ppm

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

Storage: -55°C to 120°C

Shunt Capacitance: 7.0pF Max

Drive Level: 100 uW Typical

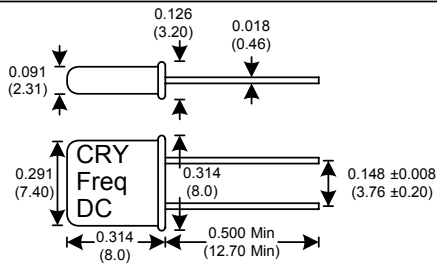
ESR: see table 1



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

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	±30ppm	(-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 = ±25ppm at 25°C, ±50ppm 0 to 70°C, 20pF Load Cap, Fundamental, 20.000MHz

Specifications subject to change without notice.

TD-021014 Rev. B

