



Quartz Crystal

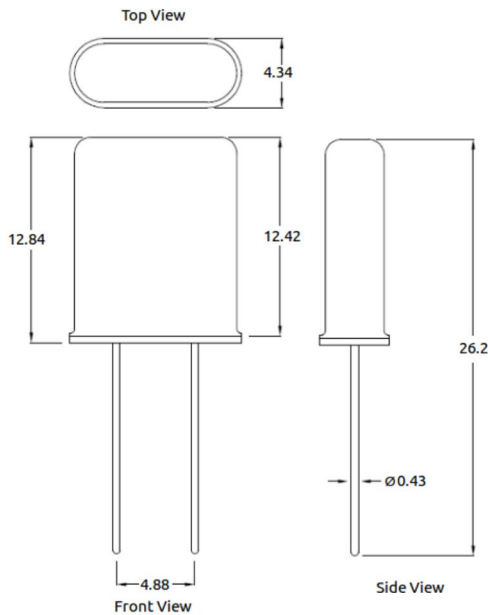
HC-49/U

Features

- Resistance welded package
- 1.8432 MHz ~ 125 MHz
- RoHS Compliant

Mechanical Specifications

Outline



▲ All dimensions are in mm. Tolerance is ± 0.3 mm, unless otherwise specified.

Table 1: General Specifications

Frequency Range	1.8432 MHz ~ 125 MHz
Frequency Tolerance @ 25°C	Select from Table 4
Operating Temperature Range	Select from Table 4
Temperature Stability	Select from Table 4
Equivalent Series Resistance	As per Table 3
Drive Level	100 μ Watts (typical)
Shunt Capacitance, C_0	7.0 pF (max.)
Resonance Condition	XXS – Series, XXP – Parallel with xx pF (for parallel, please specify the xx value in pF)
Aging @ 25°C	± 3 ppm (max.) / Year

Table 2: Frequency Range By Mode of Oscillation

Fundamental	3rd Overtone	5th Overtone
1.8432 to 36.864 MHz	20 to 85 MHz	60 to 125 MHz

Table 3: Max. ESR

Frequency Range (MHz)	ESR	Frequency Range (MHz)	ESR
Fundamental		3rd Overtone	
1.8432 to ≤ 1.999	750 Ω	20.0 to ≤ 30.0	35 Ω
2.000 to ≤ 2.399	500 Ω	30.0 to ≤ 85.0	30 Ω
2.400 to ≤ 2.999	300 Ω	5th Overtone	
3.000 to ≤ 3.199	200 Ω	60.0 to ≤ 100.0	70 Ω
3.200 to ≤ 3.699	150 Ω	100.0 to ≤ 125.0	80 Ω
3.700 to ≤ 4.199	100 Ω		
4.200 to ≤ 4.899	70 Ω		
4.900 to ≤ 4.999	55 Ω		
5.000 to ≤ 5.999	50 Ω		
6.000 to ≤ 7.999	40 Ω		
8.000 to ≤ 9.999	35 Ω		
10.000 to ≤ 12.499	30 Ω		
12.500 to ≤ 15.999	25 Ω		
16.000 to ≤ 36.864	20 Ω		

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Table 4: Operating Temperature Range and Frequency Tolerance/ Temperature Stability

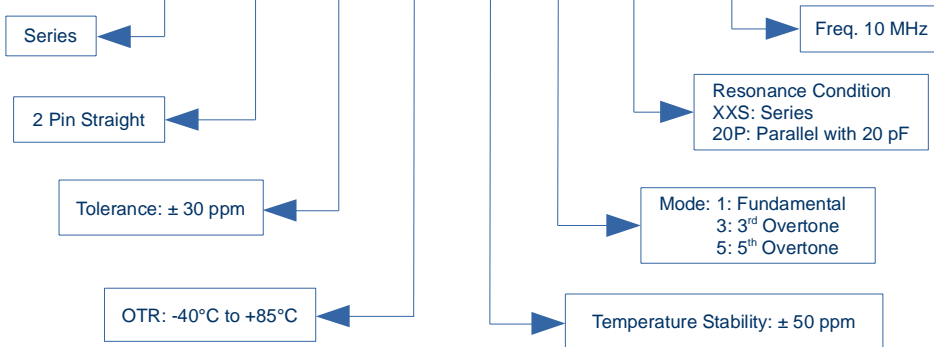
OTR Codes	Stability Codes		B	D	E	F	G	H	M	K
	Temperature Stability		± 5 ppm	± 10 ppm	± 15 ppm	± 20 ppm	± 25 ppm	± 30 ppm	± 50 ppm	± 100 ppm
A	Operating Temperature Range	0°C to +50°C								
B		0°C to +60°C								
F		0°C to +70°C								
D		-10°C to +60°C								
E		-10°C to +70°C								
C		-20°C to +70°C								
G		-30°C to +80°C								
H		-30°C to +85°C								
I		-40°C to +85°C								
J		-40°C to +90°C								
K		-55°C to +105°C								
L		-55°C to +125°C								

 Denotes Available  Denotes not Available

Ordering Information

Example

49U 2 H I M 1 20P 010M000000



Specifications subject to change without notice

Rev. Date: 28th June 2021

Note: Not all combination of options are available. Other specifications may be available upon request.

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