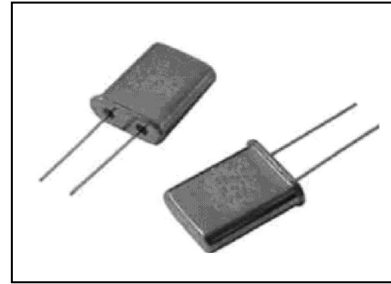


Quartz Crystal

SERIES 6A, Resistance Welded HC-49/U Package

FEATURE

- ⌘ Height 13.46mm
- ⌘ A resistance weld completely sealed type
- ⌘ The tight frequency stability
- ⌘ Copes with high density mounting and is the optimum for mass production



ELECTRICAL SPECIFICATIONS

Nominal frequency:	1.8432MHz to 150.000MHz
Oscillation mode:	See below table
Operating temperature range	-20°C--+70°C (Typical), -10°C ~ +60°C, -40°C ~ +85°C, or specify
Storage temperature range	-40°C--+85°C
Frequency tolerance:	±20PPM at 25±2°C (Typical), or specify
Frequency stability	±50PPM over -20~70°C (Typical), or specify
Load capacitance:	16pF, 18pF, 20pF, 30pF, series, or specify
Equivalent series resistance	See below table
Parallel capacitance(Co):	7PF Max
Drive level	100 μW Typical
Insulation resistance:	More than 500M Ω AT DC100V

EQUIVALENT SERIES RESISTANCE(ESR) AND OSCILLATION MODE

Frequency Range	E.S.R (Ω)	Mo	Frequency Range	E.S.R (Ω)	Mode
1.843MHz~1.999MHz	350Max	Fundamental/ AT	6.000MHz~6.999MHz	50Ma x	Fundamental/ AT
2.000MHz~2.399MHz	300Max	Fundamental/ AT	7.000MHz~9.999MHz	30Ma x	Fundamental/ AT
2.400MHz~2.999MHz	200Max	Fundamental/ AT	10.000MHz~12.999MHz	20Ma x	Fundamental/ AT
3.000MHz~3.199MHz	150Max	Fundamental/ AT	13.000MHz~30.000MHz	20Ma x	Fundamental/ AT
3.200MHz~3.499MHz	100Max	Fundamental/ AT	24.000MHz~29.999MHz	50Ma x	Third Overtone
3.500MHz~3.899MHz	90Max	Fundamental/ AT	30.000MHz~65.000MHz	40Ma x	Third Overtone
3.900MHz~4.099MHz	70Max	Fundamental/ AT	60.000MHz~99.999MHz	90Ma x	Third Overtone
4.100MHz~5.999MHz	60Max	Fundamental/ AT	100.000MHz~150.000MHz	60Ma x	Fundamental/ AT

Quartz Crystal

SERIES 6A, Resistance Welded HC-49/U Package

Mechanical characteristics

Resistance to shock:	± 3 PPM Max $\pm 3 \Omega$ Max, Naturally drop it 3 times on a hard wood plate from 100cm height
Resistance to vibration:	± 3 PPM Max $\pm 3 \Omega$ Max

Reliability

Aging	± 3 PPM Max/Year
Air tightness	
(1) Gross leak	should be immersed in hot water($90 \pm 5^\circ\text{C}$) for 5 minutes
(2) Fine leak	should be less than 5×10^{-8} atmcc/sec by helium leak detector
Low drive characteristics	Measured $\Delta 1, \text{C}1, 3$ point at 1.0,, 10, 100 μW

Dimension

