

QUARTZ CRYSTAL

SERIES 6B, RESISTANCE WELDED HC-49/S LOW PROFILE PACKAGE

FEATURE

- Standard height 3.5mm, the part is compact at about one-fourth of the HC-49/U package
- A resistance weld completely sealed type
- Good stability and high reliability
- Copes with high density mounting and is the optimum for mass production

ELECTRICAL SPECIFICATIONS

Nominal frequency	3.000MHz to 100MHz
Oscillation mode	See below table
Operating temperature range	-20℃--+70℃ (Typical), -10℃ ~ +60℃, -40℃ ~ +85℃, or specify
Storage temperature range	-40℃--+85℃
Frequency tolerance	±30ppm at 25±2℃ (Typical), or specify
Freq. Temp characteristics	±30ppm -20℃--+70℃ (Typical), or specify
Load capacitance	Series, 16pF, 20pF, 30pF, 32pF, or specify
Equivalent series resistance	See below table
Shunt Capacitance (Co)	7pF Maximum
Drive level	100 μW
Insulation resistance	More than 500M Ω AT DC100V

EQUIVALENT SERIES RESISTANCE(ESR) AND OSCILLATION MODE

Frequency Range	E.S.R (Ω)	Mode	Frequency Range	E.S.R (Ω)	Mode
3.000MHz~5.999MHz	150Max	Fundamental/AT	24.000MHz~40.320MHz	30Max	Fundamental/AT
6.000MHz~7.999MHz	60Max	Fundamental/AT	24.000MHz~29.999MHz	100Max	Third Overtone /AT
8.000MHz~15.999MHz	50Max	Fundamental/AT	30.000MHz~49.999MHz	80Max	Third Overtone /AT
16.000MHz~30.000MHz	30Max	Fundamental/AT	50.000MHz~100.000MHz	60Max	Third Overtone /AT

Mechanical characteristics

Resistance to shock:	±3ppm Max ±3 Ω Max, Naturally drop it 3 times on a hard wood plate from 100cm height
Resistance to vibration:	±3ppm Max ±3 Ω Max

QUARTZ CRYSTAL

SERIES 6B, RESISTANCE WELDED HC-49/S LOW PROFILE PACKAGE

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 $\Delta 1, \text{C1}, 3$ point at 1.0,,10,100 μW

Dimension

