

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°C--+70°C (Typical), -10°C ~ +60°C, -40°C ~ +85°C, or specify
Storage temperature range	-40°C--+85°C
Frequency tolerance	±30PPM at 25±2°C (Typical), or specify
Freq. Temp characteristics	±50PPM -20°C--+70°C (Typical), or specify
Load capacitance	Series, 16pF, 20pF, 30pF, or specify
Equivalent series resistance	See below table
Parallel capacitance(Co)	7PF Max
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 ±3Ω Max, Naturally drop it 3 times on a hard wood plate from 100cm height
Resistance to vibration:	±3PPM Max ±3Ω Max

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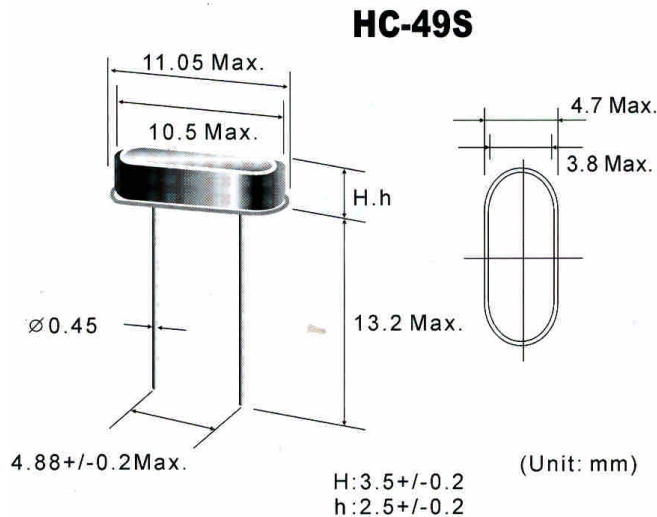
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Reliability

Aging	±3PPM Max/Year
Air tightness	
(1) Gross leak	should be immersed in hot water(90±5°C) for 5 minutes
(2) Fine leak	should be less than 5×10^{-8} atmcc/sec by helium leak detector
Low drive characteristics	Measured Δ 1,C1,3 point at 1.0,,10,100μW

Dimension



PART NUMBER

SJK	20.000	20	30	40	F	B	50	H
-6B-	Frequency e.g. 20.000:20.000 MHz	Load capacitance e.g. 20.20pf s:series	Frequency tolerance e.g. 30:±30ppm	E.S.R.max e.g. 20:40Ωmax	oscillate mode F:Fundamental 3:3rd overtone 5:5th overtone	operating temperature range A:-10-60°C B:-20-70°C C:-40-85°C	temperature stability: e.g. 50:±50ppm	H:Normal (3.2mm) h:low (2.5mm)