

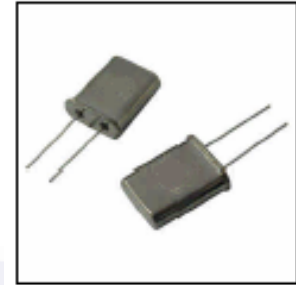
QUARTZ CRYSTAL

Holder Code A, 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
- Lead Free & RoHS Compliant



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

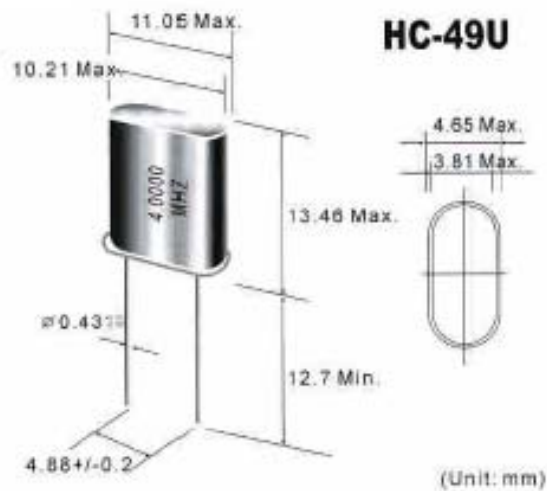
Mechanical characteristics

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

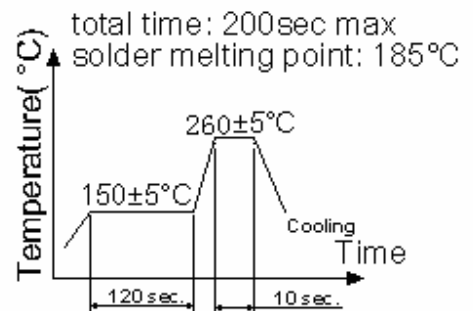
Reliability

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 5x10 ⁻⁸ atmcc/sec by helium leak detector
Low drive characteristics	Measured Δ1,C1,3 point at 1.0,,10,100μW

Dimension



Reflow Condition





CRYSTAL PART NUMBER SYSTEM

HOLDER DESCRIPTION	CODE
HC49/U	A

PART NUMBER EXPLANATION - HOW TO ORDER		
D3A5795-17305EFB-G	3,5795MHZ 17PF 30PPM/50PPM FUNDAMENTAL BULK (ROHS COMPLIANT)	
D	DB LECTRO Inc.	
3A5795	FIRST FIVE NUMBERS OF THE FREQUENCY WITH HOLDER CODE AT DECIMAL POINT	
-	"-" REGULAR PACKAGE "I" ISOLATED WITH WASHER "V" VINYL SLEEVE "C" CUT LEAD "T" THIRD LEG GROUND	
17	LOAD CAPACITANCE (17PF)	
30	FREQUENCY TOLERANCE (30PPM)	
5	FREQUENCY STABILITY AT OPERATING TEMPERATURE:	
E	OPERATING TEMPERATURE RANGE "E" EXTENDED TEMP. -40°C+85°C "Blank" TYPICAL TEMP. -20°C+70°C "A" STANDARD TEMP. -10°C+60°C	0=5PPM 1=10PPM 2=20PPM 3=30PPM 5=50PPM (TYPICAL) 6=100PPM
F	"F" FUNDAMENTAL "T" THIRD OVERTONE "5" FIFTH OVERTONE "7" SEVENTH OVERTONE	
B	"B" BULK "T" TAPE / REEL "G" TAPE / REEL / GULLWING "C" TAPE / REEL / CRIMPED LEADS	
G	ROHS COMPLIANT	