

QUARTZ CRYSTAL

Holder Code L, 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
- Lead Free & RoHS Compliant



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

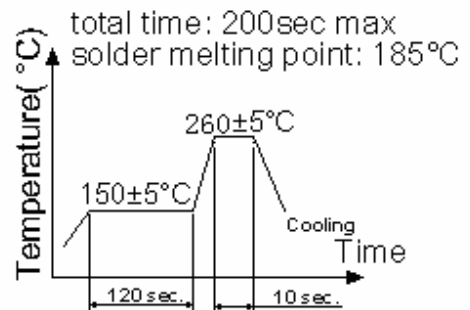
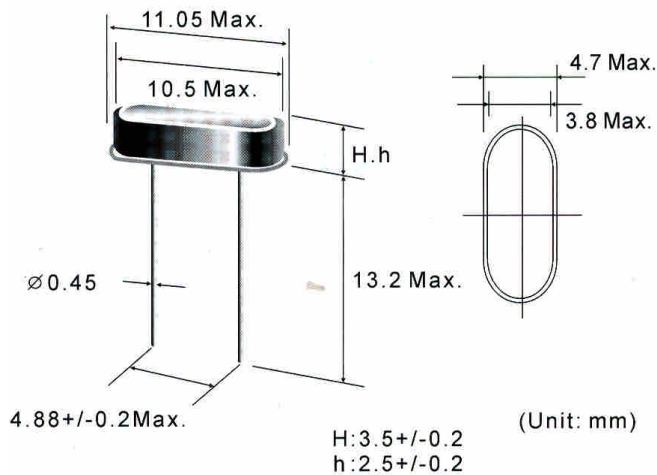
Reliability

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 5×10^{-8} atmcc/sec by helium leak detector
Low drive characteristics	Measured $\Delta 1, C1, 3$ point at 1.0,,10,100 μ W

Dimension

Reflow Condition

HC-49S





CRYSTAL PART NUMBER SYSTEM

HOLDER DESCRIPTION	CODE
HC49U/S Low Profile	L

PART NUMBER EXPLANATION - HOW TO ORDER	
D3L5795-17305EFB-G	3,5795MHZ 17PF 30PPM/50PPM FUNDAMENTAL BULK (ROHS COMPLIANT)
D	DB LECTRO Inc.
3L5795	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
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

0=5PPM
1=10PPM
2=20PPM
3=30PPM
5=50PPM (TYPICAL)
6=100PPM