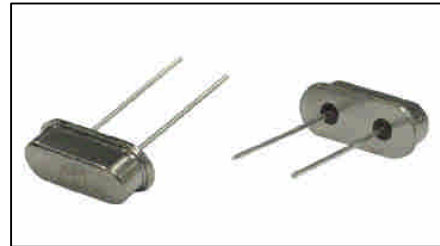


QUARTZ CRYSTAL

Holder Code H, RESISTANCE WELDED HC-49/S EXTRA 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 500MΩ 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

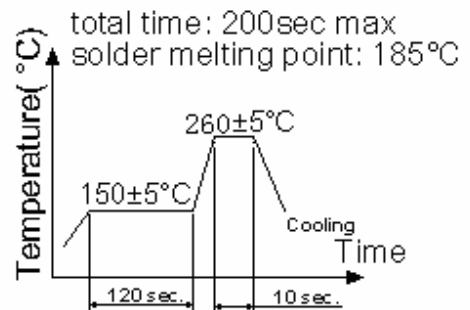
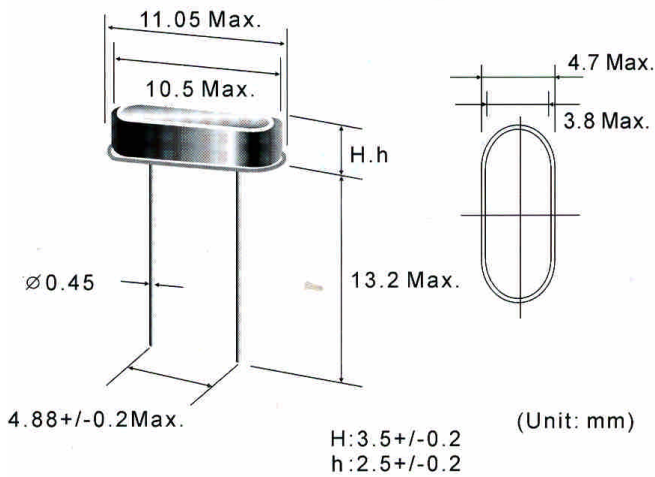
Reliability

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,,10,100 μ W

Dimension

Reflow Condition

HC-49S





CRYSTAL PART NUMBER SYSTEM

HOLDER DESCRIPTION	CODE
HC49U/S Extra Low Profile	H

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	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">OPERATING TEMPERATURE RANGE</td> <td style="width: 30%;">0=5PPM</td> </tr> <tr> <td>"E" EXTENDED TEMP. -40°C+85°C</td> <td>1=10PPM</td> </tr> <tr> <td>"Blank" TYPICAL TEMP. -20°C+70°C</td> <td>2=20PPM</td> </tr> <tr> <td>"A" STANDARD TEMP. -10°C+60°C</td> <td>3=30PPM</td> </tr> <tr> <td></td> <td>5=50PPM (TYPICAL)</td> </tr> <tr> <td></td> <td>6=100PPM</td> </tr> </table>	OPERATING TEMPERATURE RANGE	0=5PPM	"E" EXTENDED TEMP. -40°C+85°C	1=10PPM	"Blank" TYPICAL TEMP. -20°C+70°C	2=20PPM	"A" STANDARD TEMP. -10°C+60°C	3=30PPM		5=50PPM (TYPICAL)		6=100PPM
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	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												