

# 规格书

## SPECIFICATION

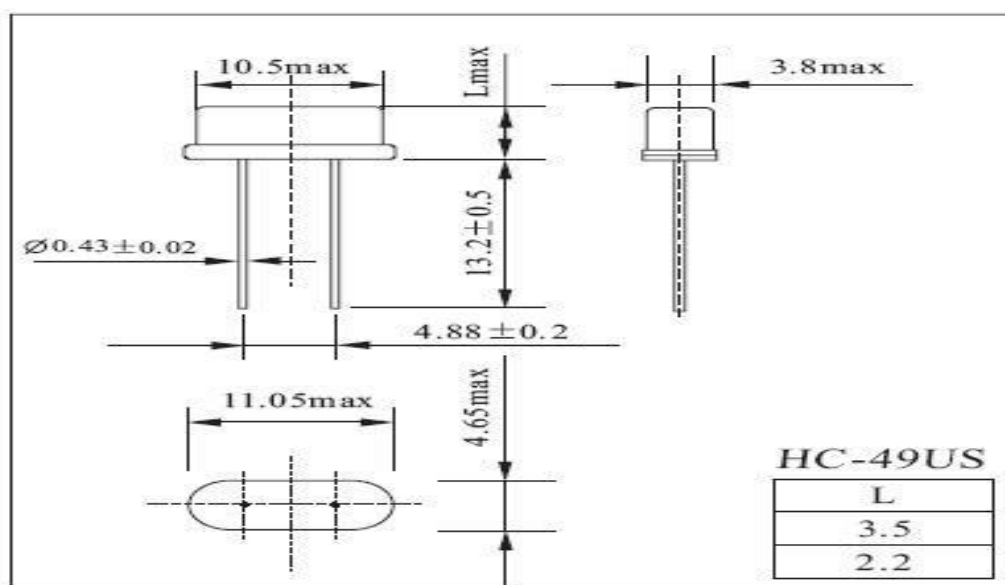
产品名称	石英晶体谐振器
<u>Description</u>	<u>Crystal Unit</u>
型号 · 标称频率	
<u>Type · Nominal Frequency</u>	<u>49S 12.000MHz</u>
规格书号	
<u>Specification .</u>	<u>JFWSI12020A204C</u>

制作  
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审核  
CHECKED BY 何 珍  
批准  
APPROBED BY 肖 琳

### 技术特性Specification

1	标称频率 Nominal Frequency	<b>12.000MHz</b>
2	规格型号 Holder Type	<b>HC-49S</b>
3	振动模式 Mode of Oscillation	<b>Fund AT</b>
4	调整频差 Frequency Tolerance at ( 25°C ±2°C )	<b>±20ppm</b>
5	温度频差 Temperature Frequency Stability vs Temp	<b>±20ppm</b>
6	工作温度 Operating Temperature Range	<b>-20~+70°C</b>
7	贮存温度 Storage Temperature Range	<b>-45~+80°C</b>
8	负载电容 Load Capacitance	<b>20pF</b>
9	静电容 Shunt capacitance	<b>&lt;5PF (Max)</b>
10	等效电阻 Equivalent Series Resistance	<b>≤35 Ω (Max)</b>
11	激励功率 Drive Level	<b>100 u W</b>
12	绝缘阻抗 Insulation Resistance	<b>500M Ω at DC100V</b>
13	年老化率 Aging Rate a Year	<b>±5PPM</b>

### 尺寸构造Dimensions&Structure

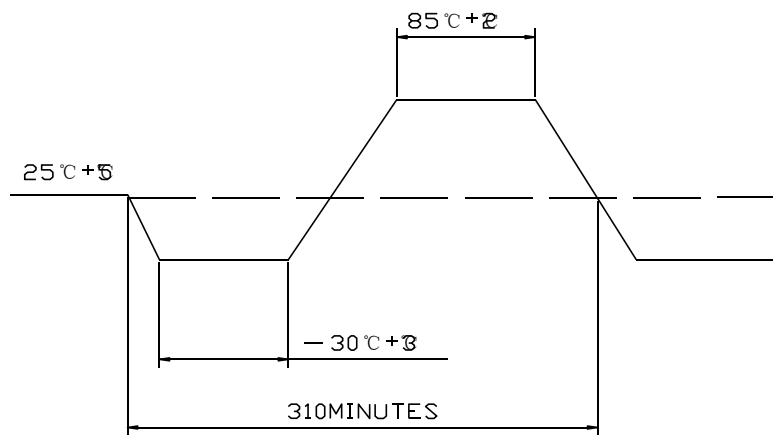


**机械及环境性能Environmental&Physical Characteristics**

	Item	Condition	Standard
1.	<b>Drop characteristics</b> 跌落性	Free drop from 75cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.)	Frequency change: ≤5ppm Rr as specification
2..	<b>Shake characteristics</b> 振动性	Shake frequency 10~55Hz, cycl~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes, test after 1 hours.	Frequency change: ≤5ppm Rr as specification
3.	<b>Airproof characteristics</b> 密封性	Put crystal into the pressure cabin with alcohol, keep pressure 0.4~0.5mpa 10 minutes, then take out and blow for 5 minutes	IR≥500MΩ
4.	<b>Weld characteristics</b> 可焊性	260±5℃, 3 seconds	90% exhibit tin ok
5.	<b>Bend characteristics</b> 弯曲性	5N, 90° , 3 times, test machine	no damage
6.	<b>Humidity characteristics</b> 恒温性	+40±2℃ & 90%~95% R.H. 250 hours	Frequency change: ≤5ppm Rr as specification
7.	<b>Low temperature characteristics</b> 低温性	-30±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤5ppm Rr as specification
8.	<b>High temperature characteristics</b> 高温性	+85±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤5ppm Rr as specification

### 温度循环 Temperature cycling

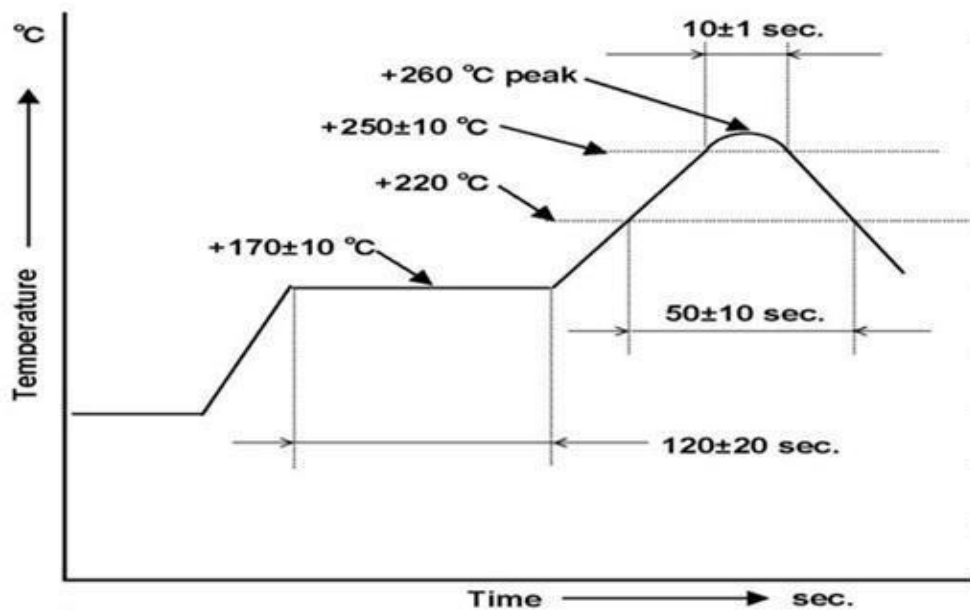
Condition:



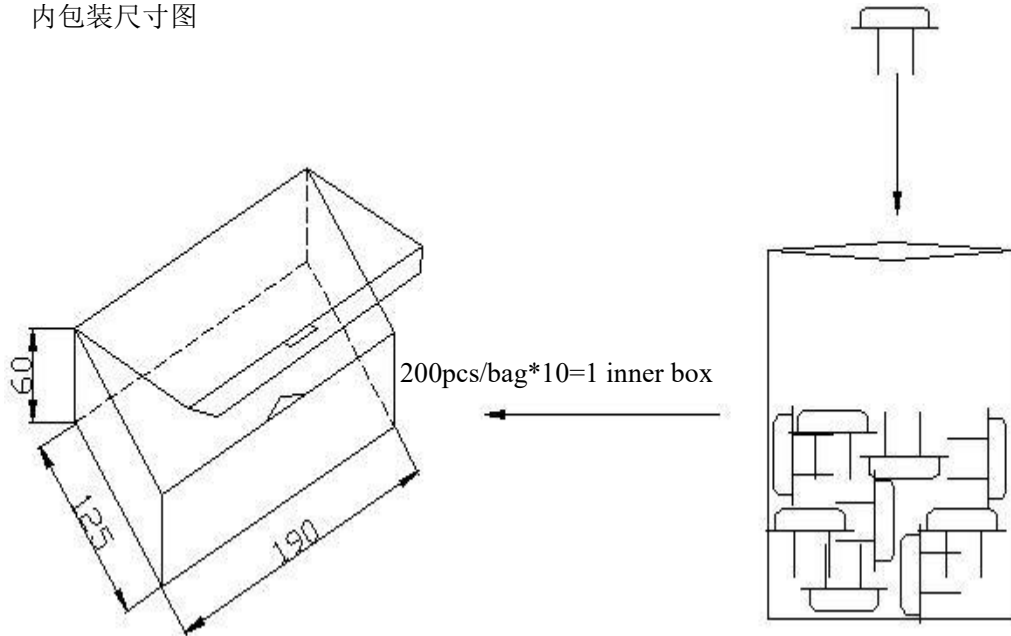
AFTER TEMPERATURE CYCLING

### 回流焊测试 Refluence examination

Condition:



Dimension of Inside Package  
内包装尺寸图



Dimensions of outside Package  
外包装尺寸图

