

# 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: Customer \_\_\_\_\_

货 名: Description SMD-M49S7 石英晶体谐振器

客户料号: Part No \_\_\_\_\_

物料编号: Code No M49SAT08000201080

频 率: Frequency 8.000MHz

日 期: Date 2020-05-22

备 注: RoHS compliance with Directive (EU) 2015/863

| 制作(Prepare by) | 检查(Check by) | 批准 (Approve by) |
|----------------|--------------|-----------------|
| 江丹娜            | 甘瑛           | 张刚              |

|                             |  |
|-----------------------------|--|
| 客户批准<br>Approve by customer |  |
| 批准日期<br>Approval date       |  |

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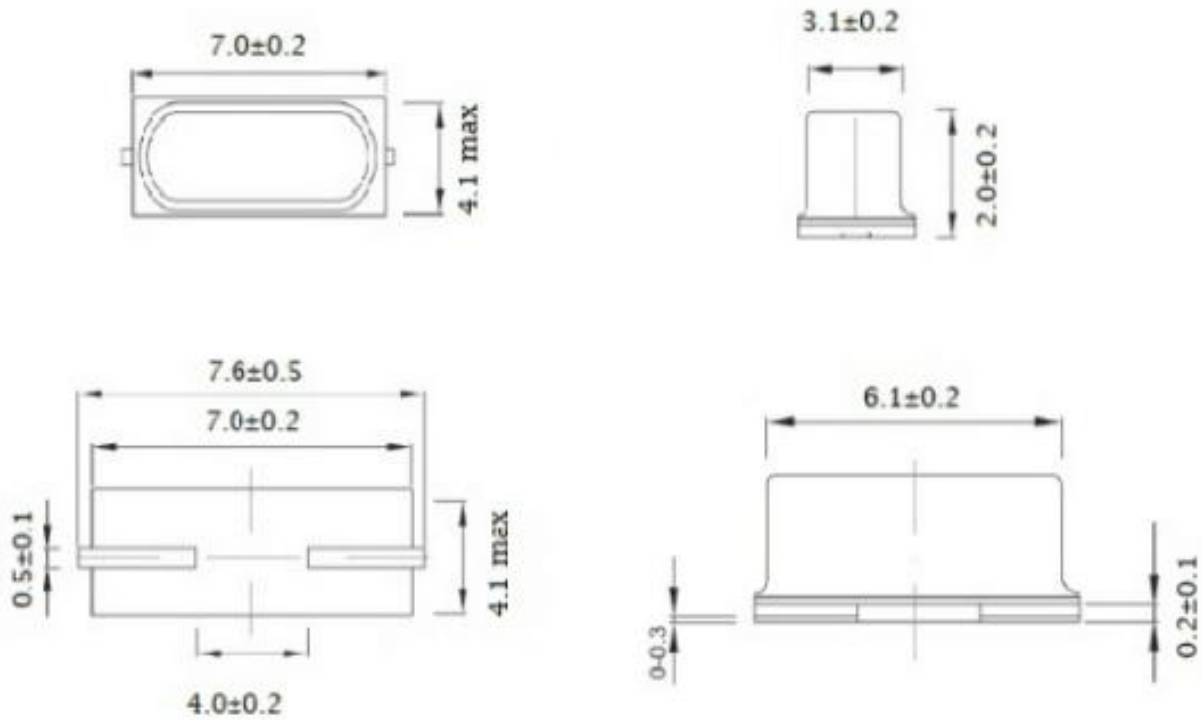
## 1、 Specifications

|    |                                      |                   |
|----|--------------------------------------|-------------------|
| 1  | 规格型号 Holder Type                     | SMD-M49S7         |
| 2  | 标称频率 Nominal Frequency               | 8.000MHz          |
| 3  | 振动模式 Mode of Oscillation             | 基频                |
| 4  | 调整频差 Frequency Tolerance at 25°C     | ±10ppm            |
| 5  | 温度频差 Temperature Frequency Stability | ±30ppm            |
| 6  | 工作温度 Operating Temperature Range     | -40~85°C          |
| 7  | 贮存温度 Storage Temperature Range       | -40~90°C          |
| 8  | 负载电容 Load Capacitance                | 20pF              |
| 9  | 静电容 Shunt capacitance                | ≤7 pF             |
| 10 | 等效电阻 Equivalent Series Resistance    | 80 Ω Max          |
| 11 | 激励功率 Drive Level                     | 10uW              |
| 12 | 绝缘阻抗 Insulation Resistance           | 500MΩ min./DC100V |

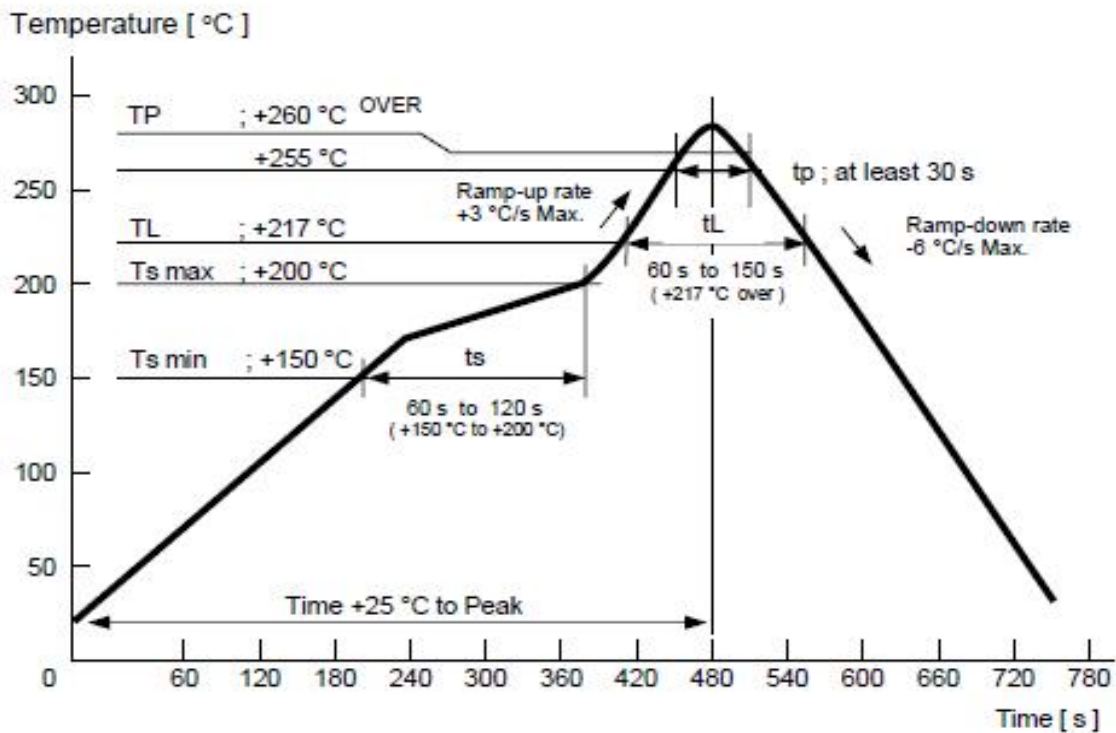
## 2、 Frequency stability over temperature range (AT cut)

| Temperature Range | Frequency Stability |       |         |        |        |        |        |        |
|-------------------|---------------------|-------|---------|--------|--------|--------|--------|--------|
|                   | ±3PPM               | ±5PPM | ±7.5PPM | ±10PPM | ±20PPM | ±30PPM | ±50PPM | ±70PPM |
| 0°C~+50°C         | ☆                   | ☆     | ☆       | ☆      | ☆      | ☆      | ☆      | ☆      |
| -10°C~+60°C       |                     |       | ☆       | ☆      | ☆      | ☆      | ☆      | ☆      |
| -20°C~+70°C       |                     |       |         | ☆      | ☆      | ☆      | ☆      | ☆      |
| -30°C~+70°C       |                     |       |         |        | ☆      | ☆      | ☆      | ☆      |
| -40°C~+85°C       |                     |       |         |        |        | ☆      | ☆      | ☆      |
| -40°C~+125°C      |                     |       |         |        |        | ☆      | ☆      | ☆      |

3、Dimensions (unit:mm)



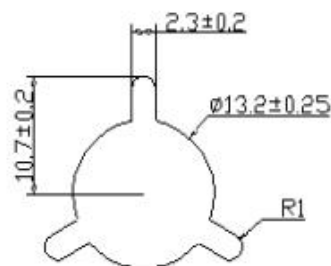
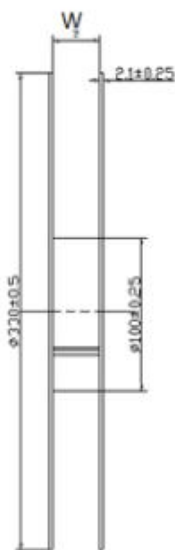
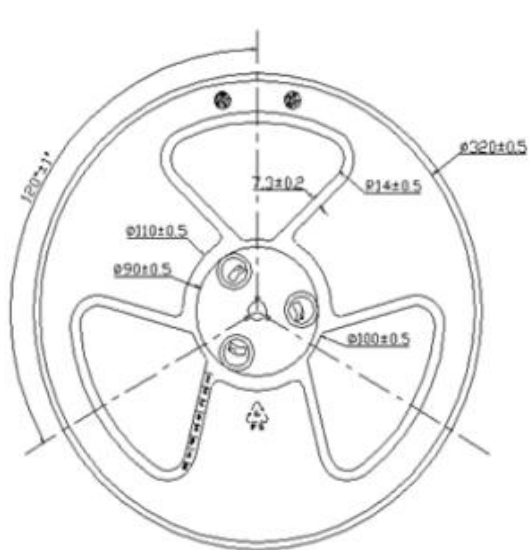
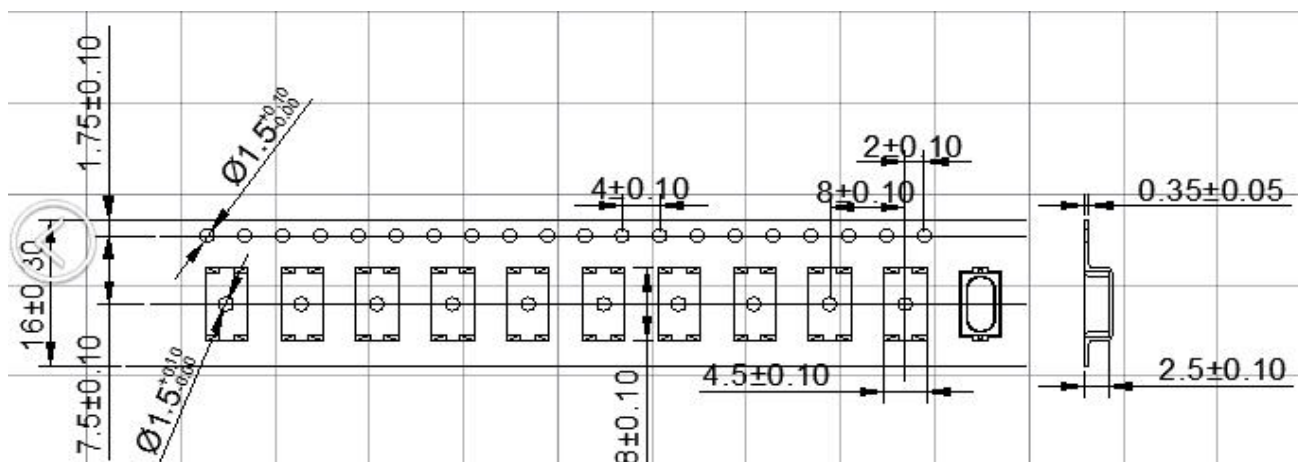
4、 Recommended Reflow profile



## 5、Reliability specifications

| NO | Item                         | Condition  | Standard   |
|----|------------------------------|--|--|
| 1. | Drop Test                    | Free drop from 50cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.)                           | Frequency change:<br>≤5ppm<br>Rr as specification  |
| 2. | Mechanical Shock             | Half sine wave, 1000G, 0.5mS, three times for all 3 directions   | Frequency change:<br>≤5ppm<br>Rr as specification  |
| 3. | Vibration                    | Frequency range:10~55hz<br>Amplitude:1.52mm<br>Sweep time:1mintutes<br>perpendicular axes each test time:2Hrs                  | Frequency change:<br>≤5ppm<br>Rr as specification  |
| 4. | Solderability                | Temperature:245℃±5℃<br>Immersing depth:0.5mm minimum<br>Immersion time:5±1sec.<br>Flux:Rosin resin methyl alcohol solvent(1:4) | 90% exhibit tin ok                                 |
| 5. | Resistance to soldering heat | Test temperature:260℃±5℃<br>Test time :10±1sec.  | Frequency change:<br>≤10ppm<br>Rr as specification |
| 6. | High Temp & Humidity         | 85±3℃ & RH85%, 500±12 hours  | Frequency change:<br>≤10ppm<br>Rr as specification |
| 7. | Low temperature storage      | -40±3℃, 500±12 hours   | Frequency change:<br>≤10ppm<br>Rr as specification |
| 8. | High temperature storage     | +85±3℃, 500±12 hours   | Frequency change:<br>≤10ppm<br>Rr as specification |
| 9. | Temperature cycling          | -40±3℃/10min~+85±3℃/10min, 100cycles   | Frequency change:<br>≤10ppm<br>Rr as specification |

6、Tape & Reel ( unit: mm )



| Available Reel Size ( mm ) |          |
|----------------------------|----------|
| Tape width                 | W±0.3 mm |
| 24 mm                      | 24.4     |

3000pcs/盘

单击下面可查看定价，库存，交付和生命周期等信息

[>>JGHC\(晶光华\)](#)