

# 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: Customer \_\_\_\_\_

货 名: Description SMD2016 石英晶体谐振器

客户料号: Part No \_\_\_\_\_

物料编号: Code No S2125000101080

频 率: Frequency 25.000MHz

日 期: Date 2020-05-23

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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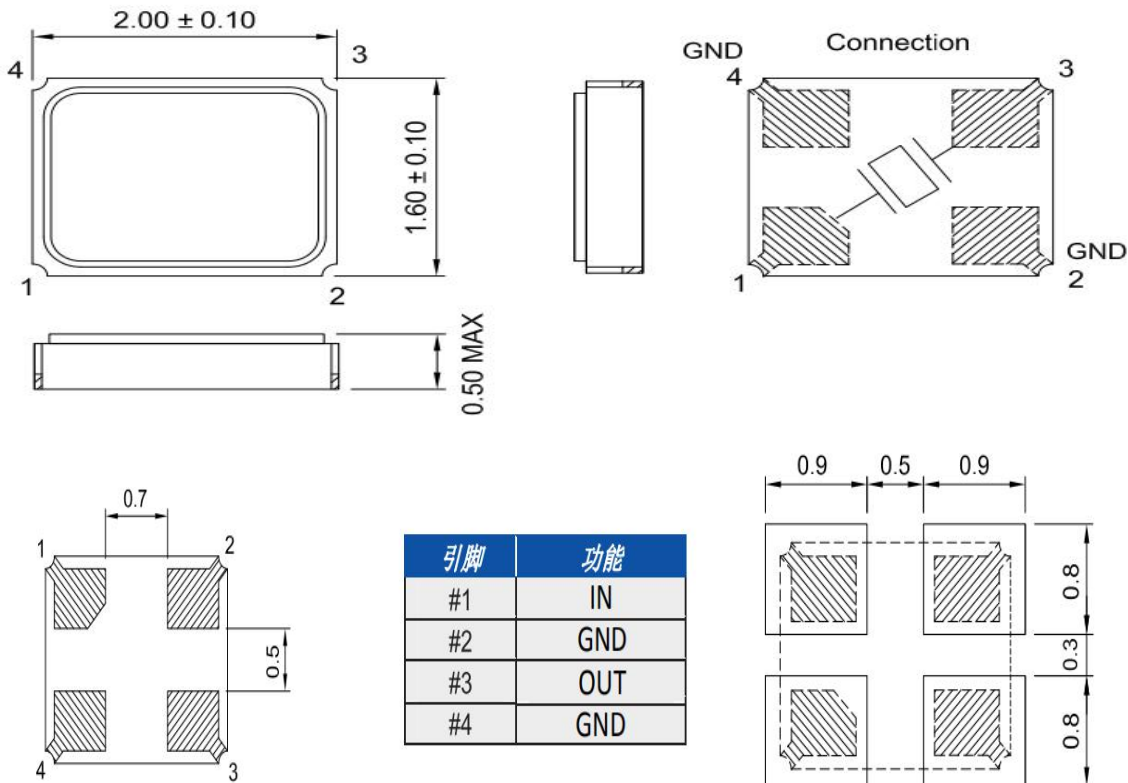
## 1、 Specifications

|    |                                      |                              |
|----|--------------------------------------|------------------------------|
| 1  | 规格型号 Holder Type                     | SMD2016                      |
| 2  | 标称频率 Nominal Frequency               | 25.000MHz                    |
| 3  | 振动模式 Mode of Oscillation             | Fundamental                  |
| 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                | 10pF                         |
| 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                     | 100uW                        |
| 12 | 绝缘阻抗 Insulation Resistance           | 500MΩ/100V±15V <sub>DC</sub> |
| 13 | 年老化率 Aging                           | ±3ppm/First year             |
| 14 | 测试仪器 Test machine                    | 250B                         |

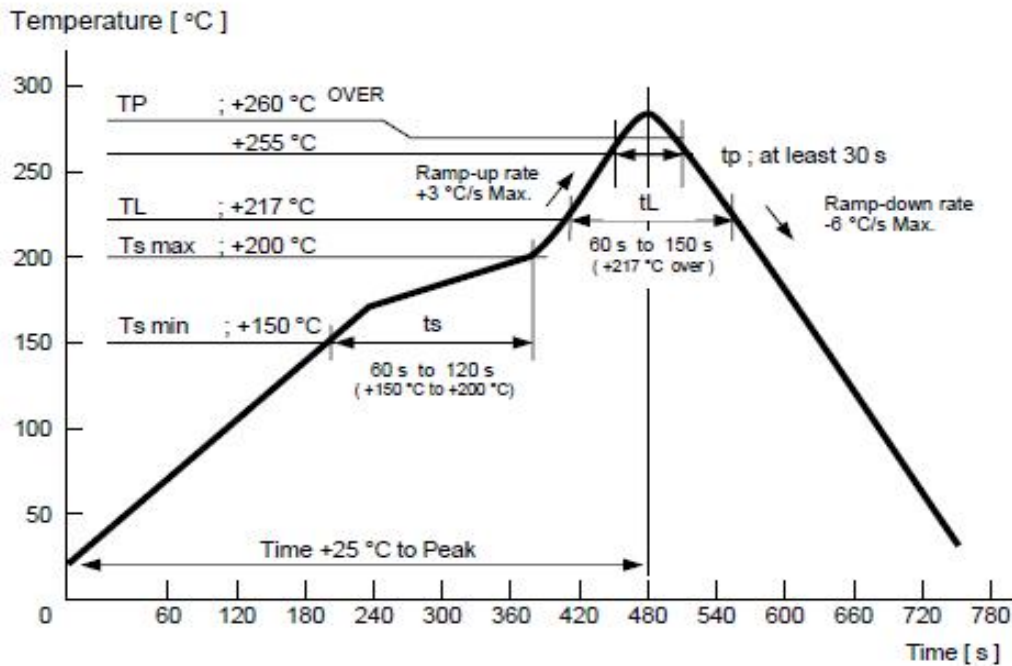
## 2. Frequency stability over temperature range (AT cut)

| 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

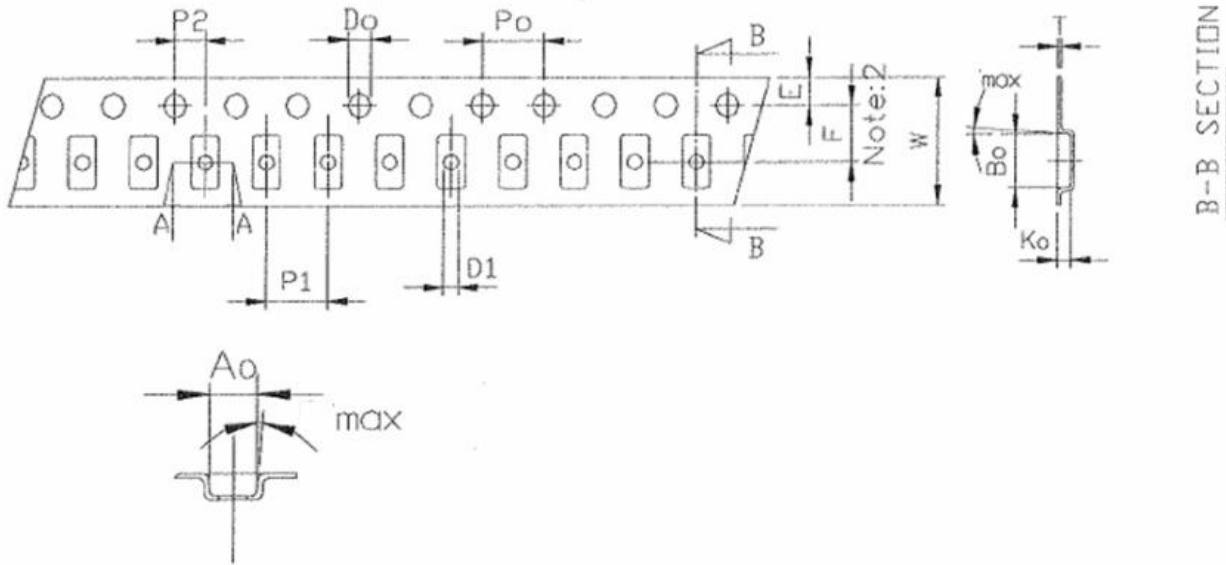


Pre-heat:+150~+200°C 60~120sec. Heating:+217°C over 60~120sec.  
 Peak temperature at least:260°C +255 °C over:minimum 30ec.

## 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、Packaging standard



| Dimension<br>PKG Type | Unit : mm |         |          |           |       |          |         |
|-----------------------|-----------|---------|----------|-----------|-------|----------|---------|
|                       | A0        | B0      | K0       | T         | W     | E        | F       |
| 2016(8mm)             | 1.9±0.1   | 2.3±0.1 | 0.65±0.1 | 0.25±0.05 | 8±0.3 | 1.75±0.2 | 3.5±0.1 |
|                       | P1        | P2      | D1       | D0        | P0    |          |         |
|                       | 4±0.1     | 2±0.1   | 1±0.05   | 1.55±0.05 | 4±0.1 |          |         |

Standard Reel Quantity is 3,000 pcs per reel.

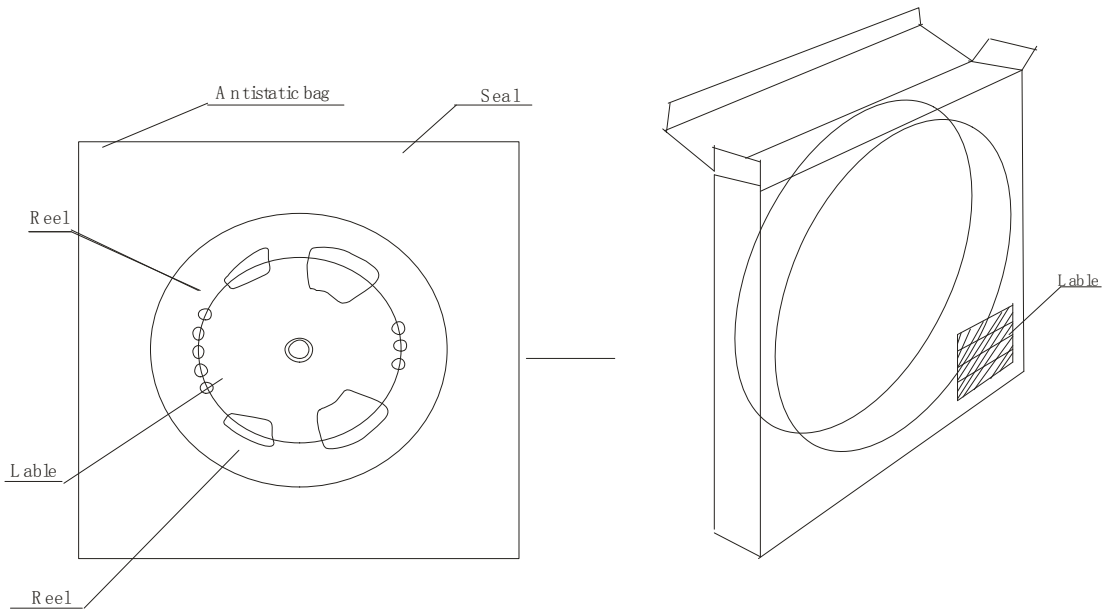
### THE INSPECTION FOR TAPE TENSION

| ITEM         | Defect   | Method  |
|--------------|--|---|
| Appearance   | ALL  | 1.The tape is not coincidence<br>2.The bubble |
| Tape Tension | 8045、7050<br>6035-12mm<br>5032-12mm<br>3225-12mm | overstep 61±6g(55~67g)                        |
|              | 3225-8mm   | overstep 40±5g(35~45g)                        |
|              | 2520-8mm   | overstep 55±6g(49~61g)                        |
|              | 2016-8mm   | overstep 34±6g(28~40g)                        |
|              | 1612-8mm   | overstep 34±6g(28~40g)                        |
|              | 6035-16mm  | overstep 60±6g(54~66g)                        |
|              | 5032-16mm  |   |
|              |  | Pull test                                     |

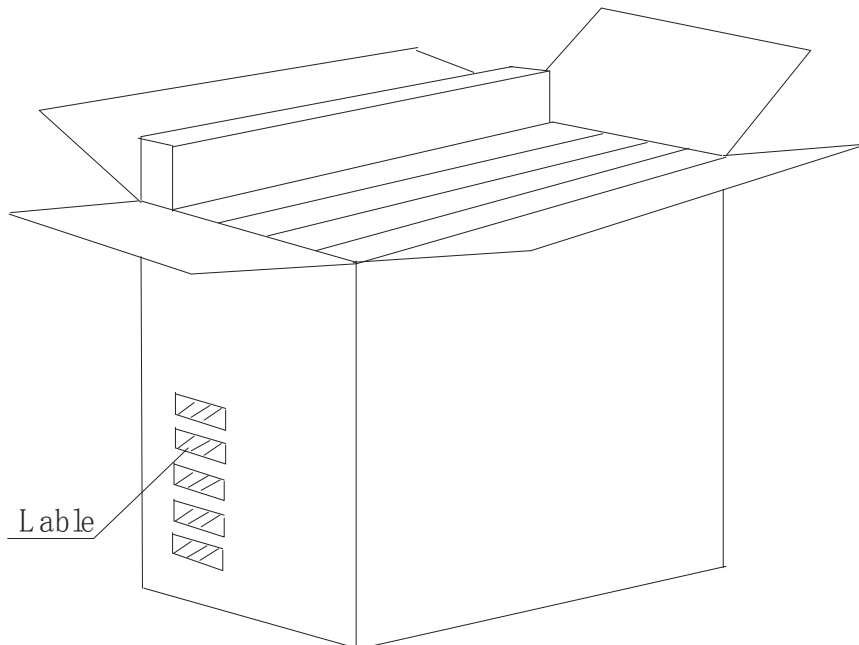
REMARK : NA

## 7. Packaging standard

### Inner carton



### OUTER CARTON



单击下面可查看定价，库存，交付和生命周期等信息

[>>JGHC\(晶光华\)](#)