Victorlands **Technical Specification**

Product name	**Quartz crystal unit**
Model	**5032/20.000MHz**
Product code	**K5A20000Q0R4B2**
Product parameters	18PF/±20PPM
Product reliability	P．2-4
Packing form	P．5

1. General item

Nominal frequency: **20.000MHz**

Vibration mode: AT Fund

Operation temperature range:**-40℃~+85℃**

Storage temperature rang:**-40℃~+85℃**

Test machine: **S&A 250B**

Drive level: **100μW**

Load capacitance:18**pF**

2. Electrical characteristics

Condition:**25±3℃** Relatively humidity**≤60%**

2.1 Frequency tolerance: **±20ppm**

2.2 Equivalent resistance:**≤60Ω**

2.3 Temperature characteristics: **±20ppm**

2.4 Shunt capacitance:**≤7pF**

2.5 Insulation resistance:**≥500MΩ/100±15V** DC

2.6 Aging characteristics: **±5ppm/year**

3. Reliability specification

3.1 Drop characteristics

Condition: height 50cm, 3 times, test after 1 hour

Equipment: S&A250B, thickness 3cm hard wood

Standard: frequency change：≤±5ppm, Rr as specification

3.2 Shake characteristics

Condition: shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes. Test after 1 hour

Equipment: S&A250B, test machine

Standard: frequency change：≤±5ppm, Rr as specification

3.3 Airproof characteristics

Condition: put crystal into the pressure cabin with alcohol, keep pressure 0.4-0.5mpa 10 minutes, then take out and blow for 5 minutes

Equipment: IR machine

Standard: IR≥500 mΩ

3.4 Weld characteristics

Condition: 235±5℃、3 seconds

Equipment: test machine

Standard: 90% adhibit tin ok

3.5 Humidity characteristics

Condition:40℃±2℃, humidity 90-95%,250 hours.

Equipment: S&A250B, test cabin

Standard: frequency change：≤±5ppm, Rr as specification

3.6 Low temperature characteristics

Condition: -30℃±2℃, after 250 hours, put in room temperature 1 hour

Equipment: S&A250B, test machine

Standard: frequency change：≤±5ppm, Rr as specification

3.7 High temperature characteristics

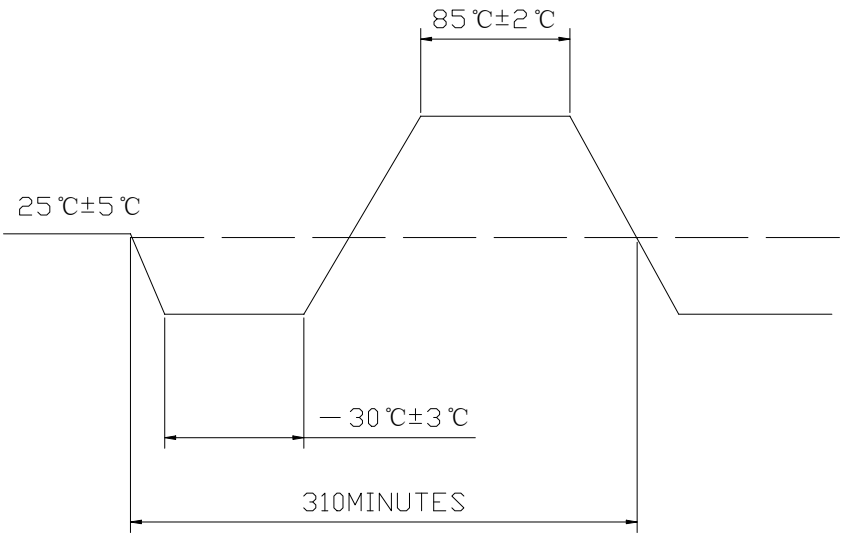
Condition: 85℃±2℃, after 250 hours, put in room temperature 1 hour

Equipment: S&A250B, test machine

Standard: frequency change：≤±5ppm, Rr as specification

3.8 Temperature cycling

Condition:



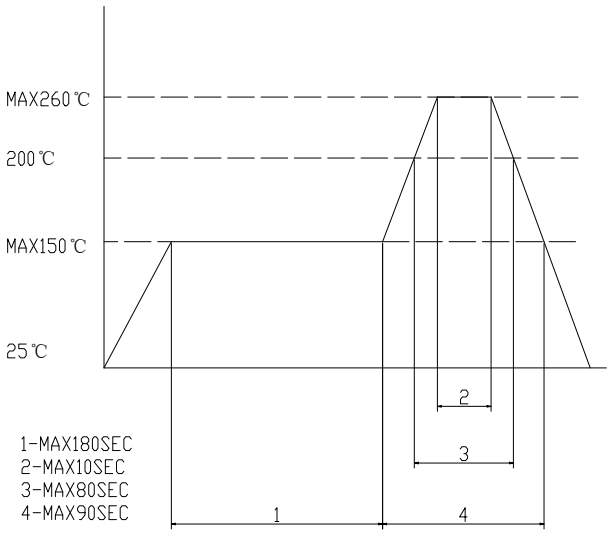
AFTER TEMPERATURE CYCLING

Equipment:S&A250B,test machine。

Standard: frequency change：≤±5ppm, Rr as specification

3.9 Refluence examination

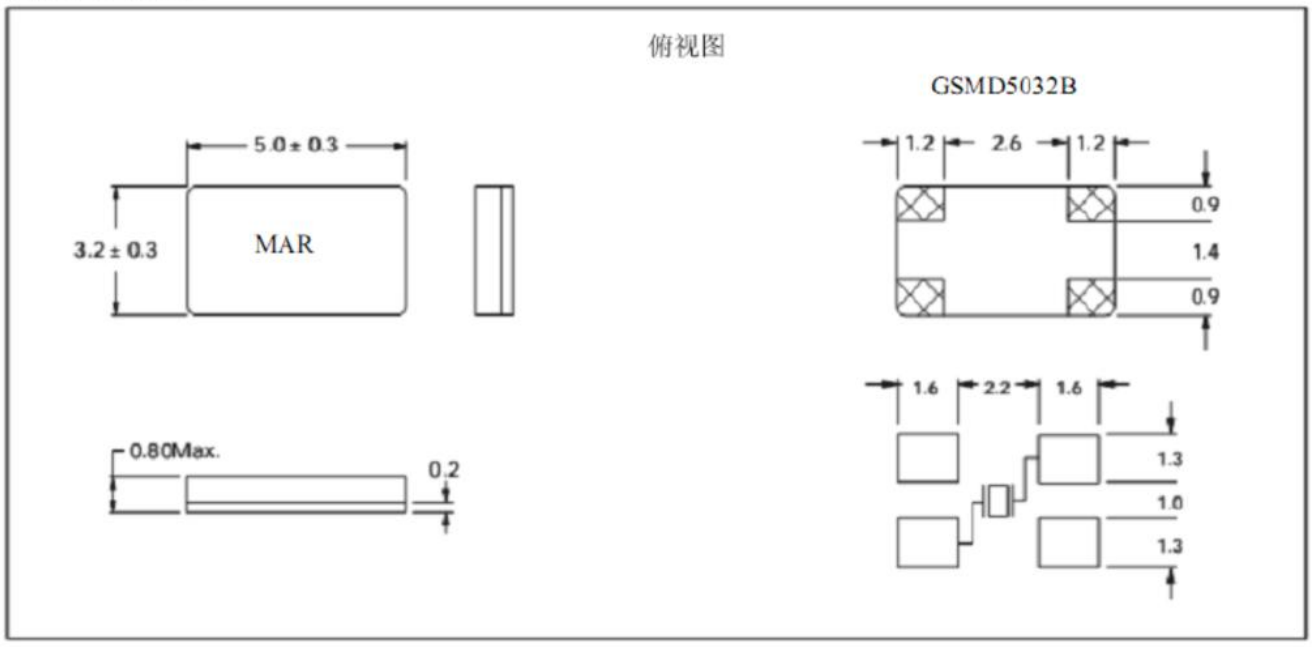
Condition:



Equipment: S&A250B, test machine

Standard: frequency change：≤±10ppm,Rr as specification

External dimensions



Dimension: mm