

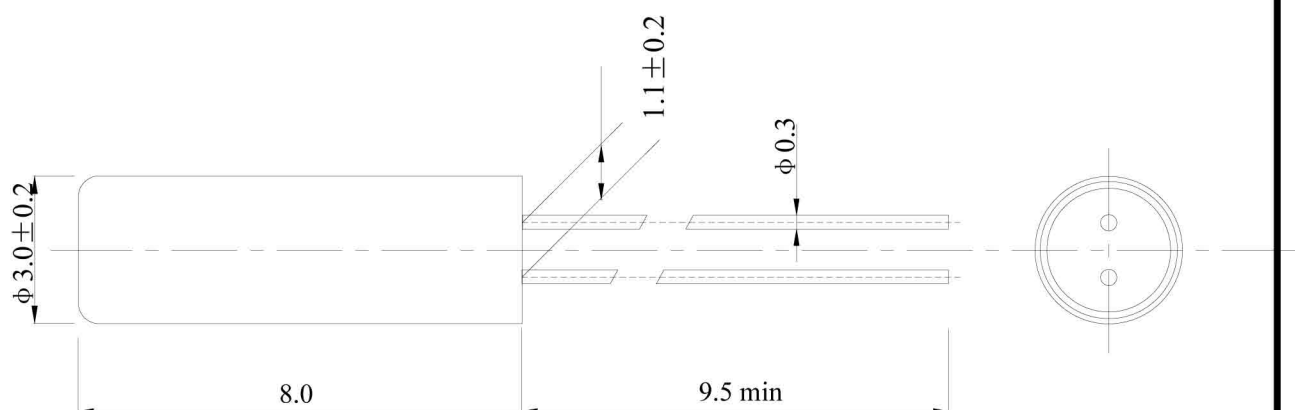
## 1. QUARTZ CRYSTAL UNIT SPECIFICATION

1.1. Frequency:	7.3728MHz
1.2. Mode of Oscillation	AT Fund.
1.3. Holder type :	AT38
1.4. Frequency tolerance:	±20ppm at 25°C ±2deg°C
1.5. Equivalent resistance (Rr) :	60Ω Max.
1.6. Operable temperature range:	-20°C To +70°C
1.7. Storage temperature range:	-40°C To +85°C
1.8. Frequency stability:	±20ppm at -20°C To +70°C
1.9. Loading capacitance (CL) :	18pF
1.10. Drive level:	10 uW Typical
1.11. Shunt Capacitance:	5.0pF MAX
1.12. Insulation resistance :	More than 100M ohms at DC 100V
1.13. Circuit:	Measured in S&A 250B
1.14. Aging:	Less than ±3 ppm/Year
1.15. Dimensions and marking	Refer to page.3

This test shall be performed under the conditions of temperature at 25°C± 2°C, humidity 60% max

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## 2. MARKING & DIMENSIONS



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### 3.MECHANICAL/ENVIRONMENTAL CHARACTERISTICS

NO.	项 目 ITEM	条 件 CONDITIONS	规 格 SPECIFICATIONS
1	漏气试验 Leaking Test	完全浸入 $90\pm 3^{\circ}\text{C}$ 热水中 3 分钟。 Fully immersed into hot water at $90^{\circ}\text{C}\pm 3^{\circ}\text{C}$ for 3 minutes.	无气泡存在 no air bubble are visible.
2	跌落试验 Drop Tset	高度 50cm, 自由落体与 3cm 木板上, 3 次. dropping three times from the height of 50 cm onto hard wooden board of thickness more than 30mm.	频率变化 $\pm 5\text{PPM}$ 以内,电阻变化 $\pm 15\%$ 以内 The crystal must meet: $ \Delta f  \leq 10\text{ppm}$ $ \Delta R  \leq 15\%$
3	振动试验 Vibration Test	频率 10~55Hz,振幅 1.5MM, 时间:每个方向 3 分钟。 Frequency: 10-55Hz , Amplitude 1.5mm 3 minutes in each of X,Y,Z 3 mutually perpendicular direction.	频率变化 $\pm 5\text{PPM}$ 以内,电阻变化 $\pm 15\%$ 以内 The crystal must meet: $ \Delta f  \leq 10\text{ppm}$ $ \Delta R  \leq 15\%$
4	可 焊 性 Solderability Test	从引线末端至距底部 2MM 处放入 $230^{\circ}\text{C}\pm 5^{\circ}\text{C}$ 焊槽内, 时间: $2\pm 0.5$ 秒。 The terminal lead wire is to be soaked in a $230^{\circ}\text{C}\pm 5^{\circ}\text{C}$ tin trough for $2\pm 0.5$ seconds.	沾锡面 $\geq 90\%$ .性能检验同振动 Tin over the wire $\geq 90\%$ The crystal must meet: $ \Delta f  \leq 5\text{ppm}$ $ \Delta R  \leq 15\%$
5	耐低温性 Low Temperature Enduring	在 $-25^{\circ}\text{C}\pm 3^{\circ}\text{C}$ 下,放置 48 小时,取出后在常温下恢复 2 小时。 The samples crystal is to be tested after being placed in the environment of $-25^{\circ}\text{C}\pm 3^{\circ}\text{C}$ for 2 hours, and recovered to room temperature.	性能检验同振动 The crystal must meet: $ \Delta f  \leq 5\text{ppm}$ $ \Delta R  \leq 15\%$
6	耐高温性 High Temperature Enduring	在 $+70^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 下放置 48 小时, 取出后在常温下恢复 2 小时。 The samples crystal is to be tested after being heated at $+70^{\circ}\text{C}\pm 2^{\circ}\text{C}$ for 2 hours, and cooled to room temperature for 2 hours.	性能检验同振动 The crystal must meet: $ \Delta f  \leq 5\text{ppm}$ $ \Delta R  \leq 15\%$
7	恒定湿热 Humidity	在 $40\pm 3^{\circ}\text{C}$ ,RH $93\%\pm 2\%$ 放置 48 小时,取出后恢复 2 小时。 The temperature is at $40\pm 3^{\circ}\text{C}$ , and at $93\%\pm 2\%$ RH after 48h, and cooled to room temperature for 2 hour..	外观无异常, 性能检验同振动 The crystal must meet: $ \Delta f  \leq 5\text{ppm}$ $ \Delta R  \leq 15\%$

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8	耐焊接热 Resistance to Solder Heat	引线端子应插入 350±10℃的焊接槽中 3±0.5 秒或 260±5℃的焊接槽中 10±15 秒，测入深度为从引线末端至距底部 2MM 处，而后放在自然环境中 2 小时，再进行测试。 Lead terminals are immersed up to 1.5mm from resonator's body in soldering bath of 350±10℃ for 3±0.5 sec. And then resonator shall be measured after being placed in room temperature for 2 hour.	试验后, 外观无异常, 性能检验同振动 The crystal must meet: $ \Delta f  \leq 5\text{ppm}$ $ \Delta R  \leq 15\%$
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