



深圳市凯越翔电子有限公司

石英谐振器规格书

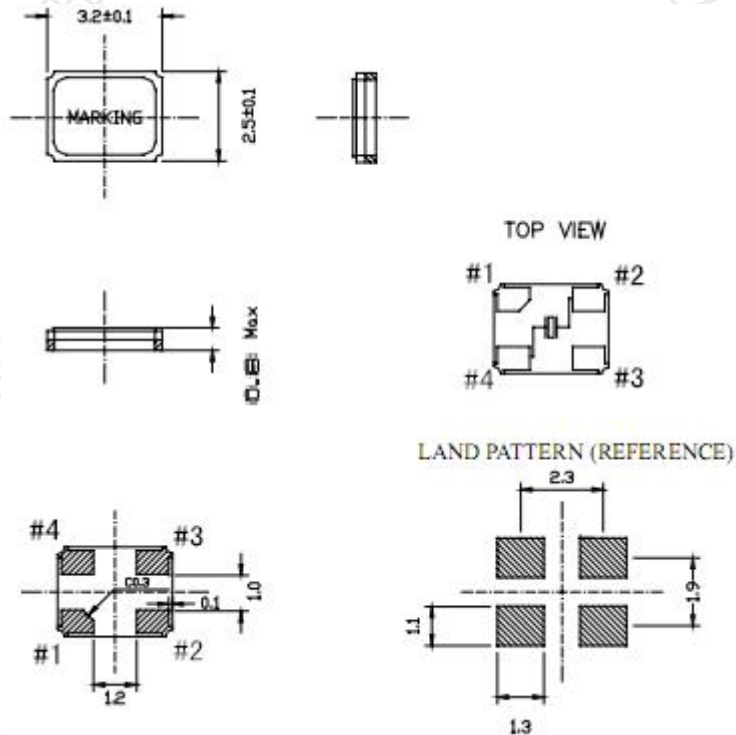
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|---------|------------------|
| 产品名称: | 石英晶振谐振器 |
| 产品型号: | 3225/13.52127MHZ |
| 产品参数: | 20PF/±10ppm |
| 原厂型号: | K3A1352A2010 |
| 凯越翔技术部: | 董宗全 |

客户确认印栏

| | |
|-------|-------|
| 认证印章 | 负责人印章 |
| 年 月 日 | 年 月 日 |

本规格章程连同本页合共 6 页

- | | |
|--|---|
| 1. Frequency: | 13.52127 MHZ |
| 2. Holder Type: | SMD3.2*2.5 |
| 3. Frequency Tolerance: | ± 10 ppm at $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ |
| 4. Equivalent Series Resistance: | 60 Ω Max |
| 5. Storage Temperature Range: | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| 6. Operating Temperature Range: | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| 7. Frequency Characteristics Over Temperatnre: | ± 20 ppm $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| 8. Load Capacitance (CL): | 20 PF |
| 9. Drive Level: | 100 μ W |
| 10. Shunt Capacitance: | 5PF MAX |
| 11. Insulation Resistance: | $\geq 500\text{M} \Omega$ Min at 100 V |
| 12. Mode Of Oscillation: | Fundamental |
| 13. Aging: | ± 3 ppm/Year |
| Marking description: | KYX13.52127 |
| 14. Dimensiors(mm): | |



16. Structure Illustration



| PART NAME | | MATERIAL | PART NAME | | MATERIAL |
|-----------|-------|----------|-----------|-----------|-------------|
| 1. | BASE | CERAMIC | 4. | ELECTRODE | Metal |
| 2. | LID | Co | 5. | ADHESMES | SILVER GLUE |
| 3. | BLANK | QUARTZ | | | |

Reliability Testing 可靠性测试项目介绍

| 项目 | 验条件及要求 | 要求 |
|--------------------------------|--|---------------------------------------|
| Vibration 振动 | Endurance condition by a frequency sweep shall be made. The entire frequency range from 10HZ to 50HZ and return to 10HZ, shall be transverseb in 1min. Amplitude(total excursion):1.5mm this motion shall be applied for a period of 2h each of 3 mutually perpendicular axes(a total of 6h) 振动频率: 从 10HZ 到 55HZ, 再回到 10HZ 1 倍频程/min 幅度为 1.5mm 3 个相互垂直的方向各 2 小时 | (1). FL: +/-10ppm (2). Rr: +/-10 Ω |
| Drop 跌落 | Form 70cm height 3 times on 3cm hard wooden floor 从 70cm 高处跌落到 3cm 厚的硬质木板上, 重复 3 次 | |
| Shock 冲击 | Peak acceleration:981m/s ² duration of the pulse :6ms three successive shocks shall be applied in both direction of 3 mutually perpendicular axes(a total of 18 shocks) 加速度: 981m/s ² 时间: 6ms 作用在 3 个相互垂直的方向 | (1). FL: +/-10ppm (2). Rr: +/-10 Ω |
| Damp heat, constant 恒定湿热 | The unit shall be stored at a temperature of 40°C ±2°C with relative humidity of 90%to95% for 48h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 在温度: 40°C ±2°C、湿度: 90%to95%条件下存放 48 小时, 然后在标准大气压下放置 1~2 小时后测试 | |
| Cold 低温存储 | The unit shall be stored at a temperature of -40°C ±5°C for 48h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 在 -40°C ±5°C 下存放 48 小时, 然后在标准大气压下放置 1~2 小时后测试 | |
| Dry heat 高温存储 | The unit shall be stored at a temperature of 100°C ±5°C for 24h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 100°C ±5°C 下存放 24 小时, 然后在标准大气压下放置 1~2 小时后测试 | |
| Aging 老化 | The unit shall be stored at a temperature of 85°C ±5°C for 7d then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 85°C ±5°C 下放置 7 天, 然后在标准大气压下放置 1~2 小时后测试 | |
| Temperature cycling 温度循环 | The unit shall be subjected to 5 successive change of temperature cycles, each as show in table below, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made 在下表给定温度和时间参数的条件下循环 5 次, 标准大气压下放置 1~2 小时后测试 | |

| | <table border="1"> <thead> <tr> <th></th> <th>Temperature 温度</th> <th>Duration 放置时间</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-40°C ± 3°C</td> <td>30min (30 分钟)</td> </tr> <tr> <td>2</td> <td>Standard atmospheric conditions 标准大气压</td> <td>Within 30s 30 秒内</td> </tr> <tr> <td>3</td> <td>100°C ± 3°C</td> <td>30min (30 分钟)</td> </tr> <tr> <td>4</td> <td>Standard atmospheric conditions 标准大气压</td> <td>Within 30s 30 秒内</td> </tr> </tbody> </table> | | Temperature 温度 | Duration 放置时间 | 1 | -40°C ± 3°C | 30min (30 分钟) | 2 | Standard atmospheric conditions 标准大气压 | Within 30s 30 秒内 | 3 | 100°C ± 3°C | 30min (30 分钟) | 4 | Standard atmospheric conditions 标准大气压 | Within 30s 30 秒内 | |
|--|---|---------------------|-------------------|------------------|---|-------------|---------------|---|--|---------------------|---|-------------|---------------|---|--|---------------------|--|
| | Temperature 温度 | Duration 放置时间 | | | | | | | | | | | | | | | |
| 1 | -40°C ± 3°C | 30min (30 分钟) | | | | | | | | | | | | | | | |
| 2 | Standard atmospheric conditions 标准大气压 | Within 30s 30 秒内 | | | | | | | | | | | | | | | |
| 3 | 100°C ± 3°C | 30min (30 分钟) | | | | | | | | | | | | | | | |
| 4 | Standard atmospheric conditions 标准大气压 | Within 30s 30 秒内 | | | | | | | | | | | | | | | |
| <p>Resistance to soldering heat 耐焊接热</p> | <p>250°C 217°C 200°C 150°C 25°C</p> <p>Peak 10s Max +4°C /s Max preheating 60 to 120s 40 to 90s -6°C /s Max cooling 25°C to peak: 360s</p> <p>TIME (Seconds) Total: 420s</p> <p>使用回流焊方法见上图</p> | | | | | | | | | | | | | | | | |

■ PACKING

1. CARRIER TYPE



2. REEL : 3000 PCS



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| 拟制 | 成望生 | 审核 | 董宗全 | 批准 | 谢为亮 |
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