
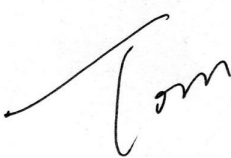
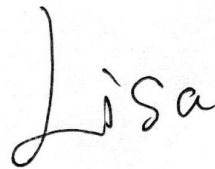


| | |
|------------------------|--------------------|
| Customer | |
| Production Name | OSC 2.0*1.6 |
| Customer P/N | N/A |
| TROQ P/N | RU24000016 |
| Revision | A |
| Print Date | 2023/5/11 |

| Drawn | Checked | Approved |
|---|---|---|
|  |  |  |

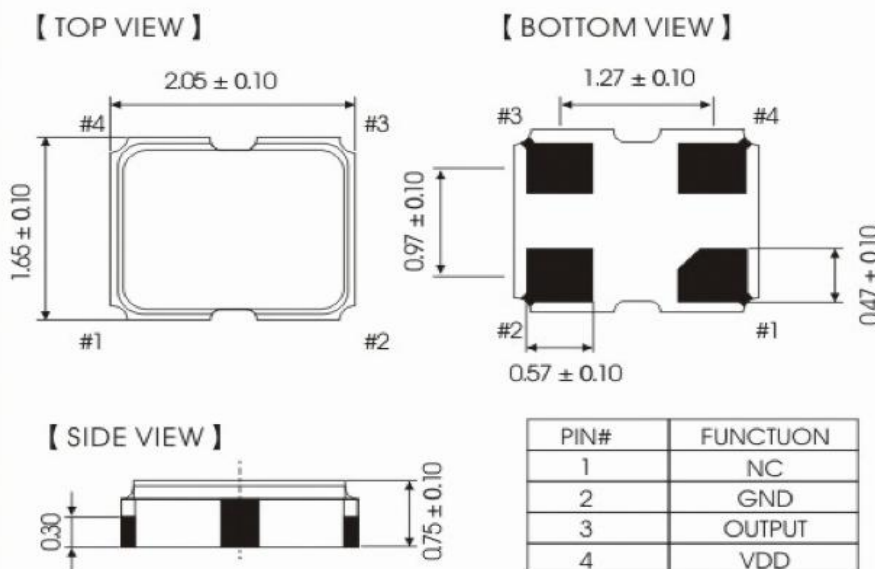


Conforms to AEC-Q200

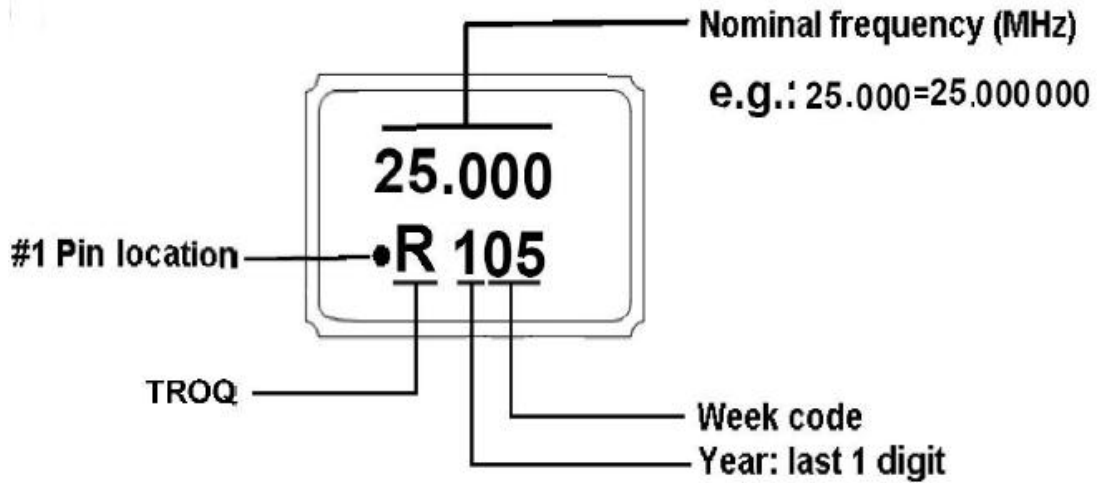
● ELECTRICAL PARAMETERS

| 谐振器产品技术指标 | Min | Max | Units |
|------------------------------------|---|---------|----------|
| 1.Holder Type | OSC 2.0*1.6 | | |
| 2.Mode of Oscillation | Fundamental | | |
| 3.Frequency | 24.000000 | | MHZ |
| 4.Load Capacitance (CL) | 15 | | pF |
| 5.Frequency Tolerance | -25 | 25 | ppm |
| 6.Operating Temperature Range | -40 | 85 | °C |
| 7.Storage Temperature Range | -55 | 125 | °C |
| 8.Supply Voltage(VDD) | 1.6~3.6 | | V |
| 9.“0”Level (VOL) | | VDD×0.1 | V |
| 10.“1”Level(VOH) | VDD×0.9 | | V |
| 11.Enable High Voltage(ELH) | VDD×0.7 | | V |
| 12.Enable Low Voltage(ELL) | | VDD×0.3 | V |
| 13.Symmetry of Wave From(Symmetry) | 45~55% | | |
| 14.Current Consumption(IDD) | | 5.0 | m A |
| 15.Rise and Fall Time(Tr,Tf) | | 5.0 | nSec |
| 16.Start time(tosc) | | 2.0 | mSec |
| 17.Aging | ± 3 | | ppm/year |
| 18.Output waveform | CMOS | | |
| 19.Other | Moisture Sensitivity Level (零件湿敏等级) Level 1 | | |

OUTLINE DIMENSIONS(UNIT:mm) 外形尺寸 (单位: mm)



● **Marking (标记)**

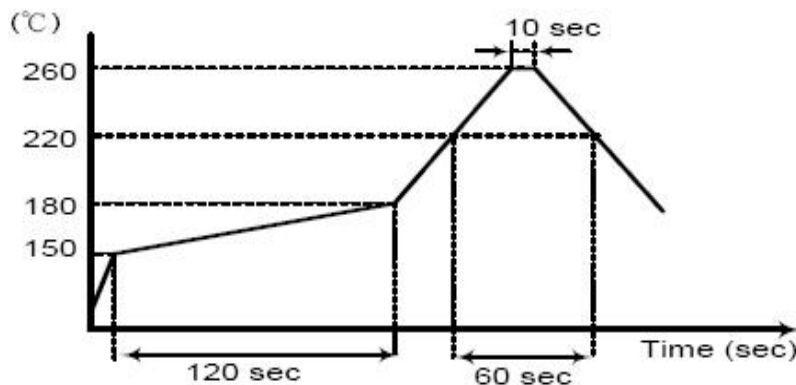


● **SUGGESTED REFLOW PROFILE** (回流焊曲线图)

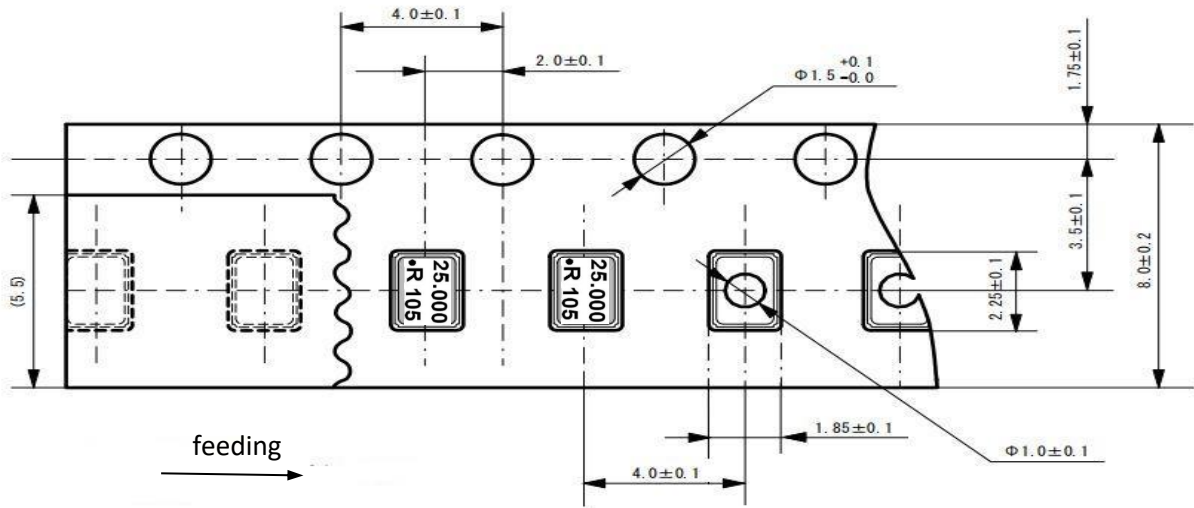
Total time:200sec.Max. (总时间: 200秒 最大)

Solder melting point:220°C (熔点220 °C)

| Profiles Feature (特性) | | Pb-Free Assembly |
|---|---------------|------------------|
| Average Ramp-up Rate(Ts max to Tp) | 平均升温速度 | 3°C/second Max |
| Preheat | 预热 | |
| ■ Temperature Min (Ts min) | 最低温度 | 125°C |
| ■ Temperature Max (Ts max) | 最高温度 | 200°C |
| ■ Time (ts min to ts max) | 从最低到最高时间 | (60~180) seconds |
| Time maintained above | 维持上述时间 | |
| ■ Temperature(T1) | 温度 | 217°C |
| ■ Time(tp) | 时间 | (60~150) seconds |
| Peak/Classification Temperature(Tp) | 最高点温度 | 260 °C |
| Time within 5°C of actual Peak Temperature(tp) | 高温维持时间 | (20~40) seconds |
| Ramp-down rate | 降温速度 | 6°C/second max |
| Time 25°C to Peak Temperature | 从25°C到最高温度的时间 | 8 minutes max |
| Suggest reflow times | 建议 reflow次数 | 3 Times max |

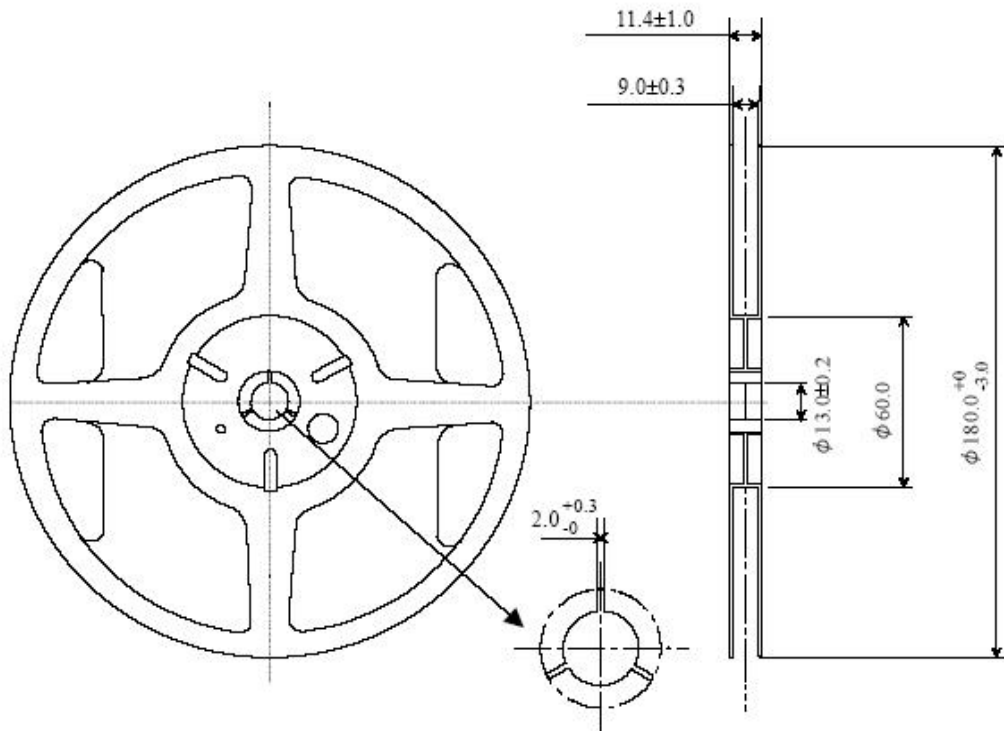


- PACKING (包装) 3Kpcs/REEL



8.3. Reel dimension & Outline drawing

Material of the Reel : PS



● RELIABILITY SPECIFICATIONS (信赖度试验)

| No | Test Item (测试项目) | Test Conditions (测试条件) | Reference (参考) |
|----|---|---|--|
| 1 | High Temperature High Humidity Storage (高温、高湿、储存) | Temperature: 85°C±3°C 温度: 85°C±3°C Relative Humidity:85%RH 相对湿度: 85%RH Time: 96 Hours 时间: 96小时 | JIS C5023 |
| 2 | High Temperature Storage (高温储存) | Temperature: 125°C±3°C 温度:125°C ±3°C Time: 96 Hours 时间:96 小时 | MIL-STD-883E Method 1005.8 |
| 3 | Low Temperature Storage (低温储存) | Temperature: -40°C ±3°C 温度: -40°C ±3°C Time: 96Hours 时间: 96小时 | MIL-STD-883E Method 1013 |
| 4 | Thermal Shock (温度冲击) | Temperature1:-55°C ±5°C 温度1:-55°C ±5°C Temperature2:85°C ±5 °C 温度2: 85°C ±5 °C Temperature change between T1 and T2 5 min T1和T2温度在5分钟内改变 10cycles maintain T1 and T2 for 30 minutes each mone cycle 每次循环30分钟共10次 | MIL-STD-202F Method 107 Condition A |
| 5 | RESISTANCE TO SOLDER HEAT (耐焊接热) | Solder Temperature: 260°C ±5°C 焊槽温度:260°C ±5°C Time: 10±1 Seconds 时间: 10±1秒 | MIL-STD-202F Method 210E |
| 6 | Solderability(可焊性) | The solder pot temperature is 245±5°C , dwell time 5±0.5 245±5°C焊锡槽浸润5±0.5秒 | J-STD-002B |
| 7 | Drop Test (落下试验) | 3 Times Free Fall from 75cm height table to 3cm thickness hard wood board 从75cm高度3次跌落到3cm厚硬质木板上 | JIS C6701 |
| 8 | MECHANICAL SHOCK (机械冲击) | Half sine wave,1000 G 半正弦波,加速度1000G 3 Times for all 3 directions X、Y、Z 三个相互垂直方向各三次 | MIL-STD-202F Method 213B |
| 9 | Vibration (机械振动) | Frequency Range: 10Hz~55Hz 频率范围: 10Hz~55Hz Amplitude: 0.75mm 振幅: 0.75mm 2 Hours in each direction, total 6 Hours X、Y、Z 三个相互垂直方向各振动2小时 | MIL-STD-883E Method 2007.3 |
| 10 | Leakage Test (气密性) | Take measurements with a helium Leakage detector 氦质检漏 Leakage Rate≤1×10 ⁻³ Pa cm ³ /s 漏率≤1×10 ⁻³ Pa cm ³ /s | MIL-STD-883E |