

Features 特性

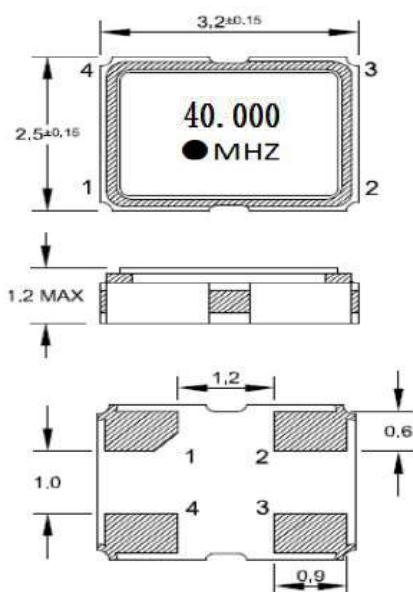
- Miniature package微型封装:3.2×2.5×1.2MAX
- Tri-state enable/disable:三态输出
- 3.3v input voltage:3.3V 输入电压

STANDARD SPECIFICATIONS 標準規格

Model		TXO-3225
Item		
Frequency Range (KHz)	频率范围	40.000MHz
Frequency stability	频率误差	±50 ppm Max.(包括常温及工作温度范围内的全温度频差)
Operating in Temperature Range	工作温度范围	(-40℃~+85℃)
Storage Temperature Range	储存温度范围	(-55℃~+125℃)
Power supply voltage	输入电压	3.3V±10%
Aging	老化率	±5ppm/year Max.
Current consumption	消耗电流	5mA Max
Symmetry	占空比	40-60%
Rise time	上升时间	6ns Max (10%~90%)
Fall time	下降时间	6ns Max (10%~90%)
High Output Voltage	高电平	90% VDD min
Low Output Voltage	低电平	10% VDD max
Output Load CMOS;	负载	15pF

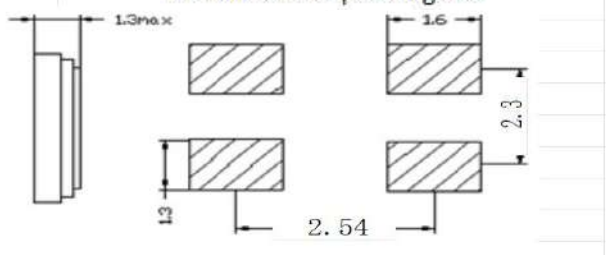
OUTLINE DIMENSIONS (unit: mm)

外形及印字



推荐焊盘图

Recommended pad diagram



脚位: PIN

1#
2#
3#
4#

功能 FUNCTION

使能端 TRI-STATE
接地 GROUND
输出 OUTPUT
电压 VDD

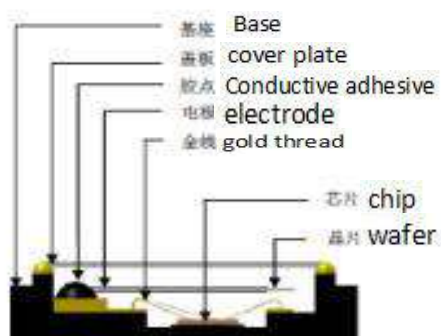
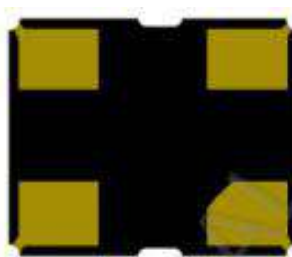
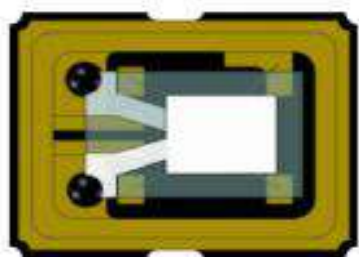
Hover/output open

OE=高(VIH>0.7VDD)/悬空: 输出打开
OE=低(VIL<0.3VDD): 输出关闭

Output off

单位: 毫米
Unit: mm

Internal structure

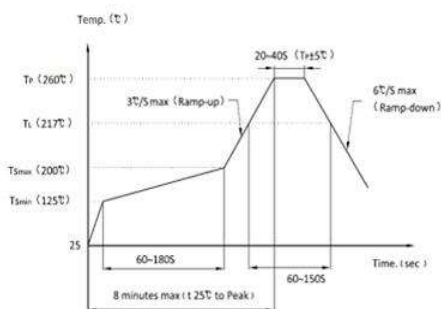


编号	零件	材料
1	基座	AL ₂ O ₃
2	盖板	可阀合晶 (铁+钴+镍) Fe-Co-Ni
3	导电胶	银/硅 Ag/Si
4	电极	贵金属 Precious metal
5	晶片	SiO ₂
6	芯片	硅 Si
7	金线	金 Au

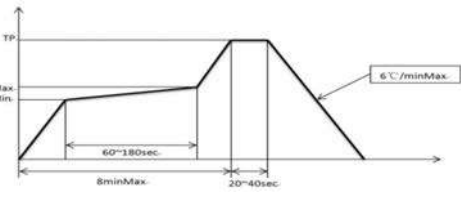
■MSL:

1级 (J-STD-033)

■建议焊接曲线 Recommended welding curve

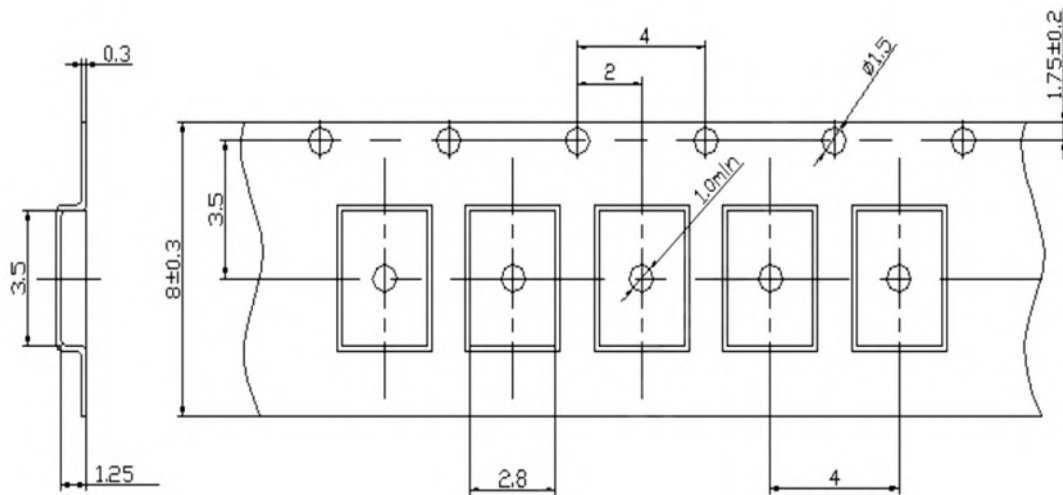
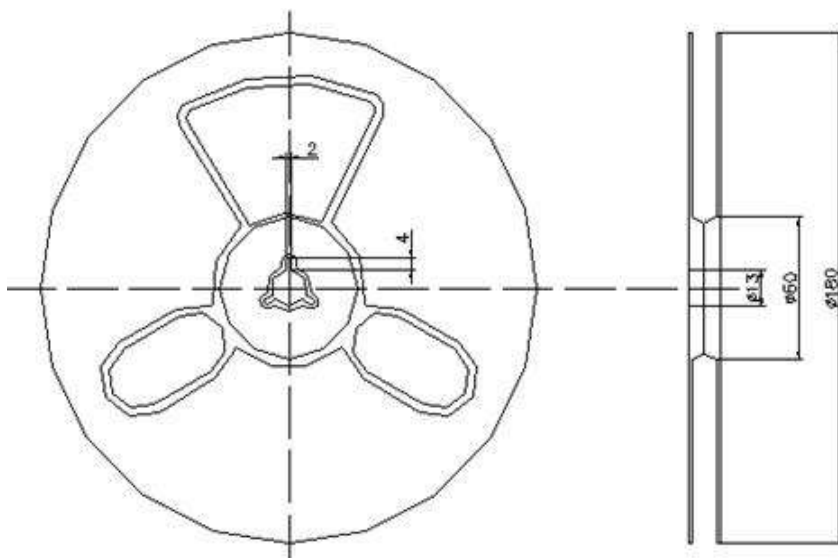


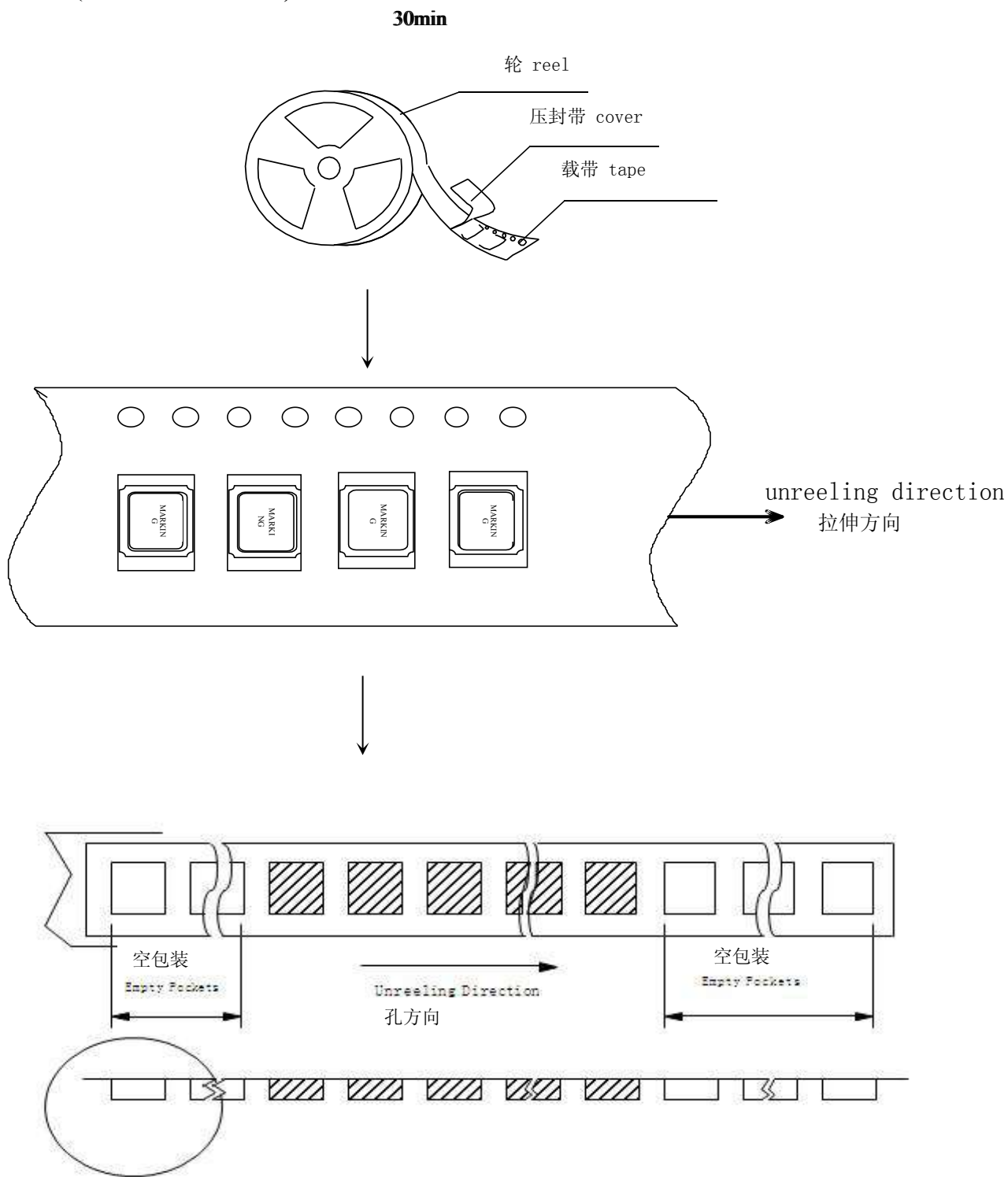
Reliability(Mechanical and Environmental Endurance)

序号 NO	项目 ITEM	条件 CONDITIONS	合格标准 BASIS OF VERDICT
1	高温贮存 High Temperature Storage	工作温度:125℃ Working temperature: 125 °C 不带电, 试验结束后24±2小时测试 Not power, test 24 ± 2 hours after the end of the test. 时间: 1000小时 Time: 1000 hours	$\Delta F = \pm 10$ ppm MAX
2	恒定湿热 Steady damp-heat	温度:85C±2℃, 湿度85%;时间:1000小时 Temperature: 85C ± 2 °C, humidity: 85%; Time: 1000 hours 试验结束后24±2小时进行测试 Conduct the test within 24 ± 2 hours after the end of the experiment	$\Delta F = \pm 10$ ppm MAX
3	老化 Ageing	工作温度:85℃ Working temperature: 85 °C 时间: 1000小时, 加额定电压VDD, 试验结束后24±2小时进行测试 Time: 1000 hours, with rated voltage VDD applied, testing will be conducted 24±2 hours after the end of the test	$\Delta F = \pm 10$ ppm MAX
4	低温贮存 Low temperature storage	温度:-40℃ Temperature: -40 °C 时间: 1000小时 Time: 1000 hours 试验结束后24±2小时进行测试 Testing will be conducted 24±2 hours after the end of the test	$\Delta F = \pm 10$ ppm MAX
5	温度循环 Temperature cycling	-55℃±2℃~-125℃±2℃;循环1000次 -55℃±2° C~-125℃±2° C;Cycle 1000 times 最大转换时间:1分钟 Maximum conversion time: 1 minute 高低温保存时间:30分钟 High and low temperature storage time: 30 minutes	$\Delta F = \pm 10$ ppm MAX
6	跌落 Drop	高度:1米, 自由跌落至10mm~19mm木板垫衬的3mm钢板上, 循环3次 Height: 1 meter, freely falling onto 3mm steel plates lined with 10mm~19mm wooden boards,Cycle 3 times	$\Delta F = \pm 5$ ppm MAX
7	机械冲击 Mechanical shock	峰值: 100g's Peak value: 100g's 持续时间:6ms Duration: 6ms 波形:半正弦波 Waveform: Half sine wave 变化速度:12.3ft/秒 Change speed: 12.3ft/s 振动方向:+X, -X, +Y, -Y, +Z, -Z Vibration direction:+X, - X,+Y, - Y,+Z, - Z 每个方向各3次 3 times in each direction 最后进行电性能测试	$\Delta F = \pm 5$ ppm MAX
8	振动 vibrate	频率:10~2000Hz;加速度幅度:5g/s Frequency: 10~2000Hz: Acceleration amplitude: 5g/s 振动方向:X,Y,Z Vibration direction:X, Y, Z 振动时间:每个方向20分钟 Vibration time: 20 minutes in each direction 循环次数:12次 Cycle 12 times	$\Delta F = \pm 5$ ppm MAX
9	耐焊接热 Resistance to Soldering Heat	 TP:260℃最大TsMax: 200℃ TsMin: 150C 周期:2次 Cycle: 2 times	$\Delta F = \pm 5$ ppm MAX 外观完好 Intact appearance
10	可焊性 Solderability	试验前预处理:155℃高温贮存4小时 Pre test pretreatment: Store at 155 °C for 4 hours at high temperature 温度:260℃±5℃的锡槽中浸渍 Immersion in a tin bath at a temperature of 260 ° C ± 5 ° C	浸锡率≥95% Tin immersion rate ≥ 95%
11	引出端强度 Terminal tensile strength	1.8kg的切向推力60 (+1) 秒 Tangential thrust of 1.8kg for 60 (+1) seconds	电极不断裂 The electrode is not broken

TXO-5032編帶規格TAPE AND REEL SPECIFICATION

1. 編帶規格符合美國電子工業協會EIA-481-B電子元件編帶標準Tape and Reel form conform to EIA-481-B
2. 每盤的晶體元件數量為3000只。The quantity of crystal units per reel shall be 3000PCS.
3. 在包裝盒及載帶盤的表面貼上標籤，注明必需的資訊A "LABEL" on which necessary information is clearly written is on the surface of packing box and the reel.

載帶尺寸圖CARRIER TAPE DIMENSIONS
■ 編帶

載帶盤尺寸圖REEL DIMENSIONS


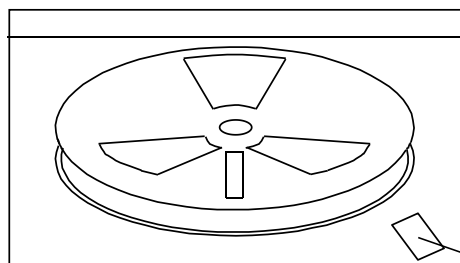
TX0-5032编带规格TAPE AND REEL SPECIFICATION
■ 编带方式(TAPING METHOD)


TX0-5032编带规格TAPE AND REEL SPECIFICATION
■包装 (PACKAGE)

1. 自封袋 (Bag)

3000只=1 轮

3000pcs=1 Reel

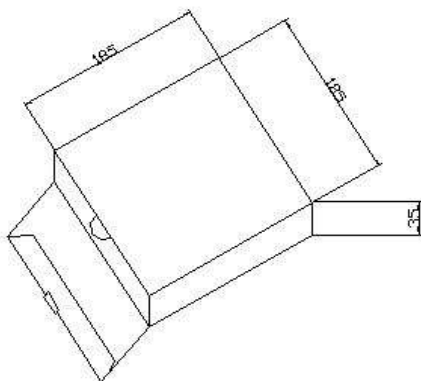
30min


Desiccant 干燥剂

2. 内包装 (Inside package)

1 轮=1 盒

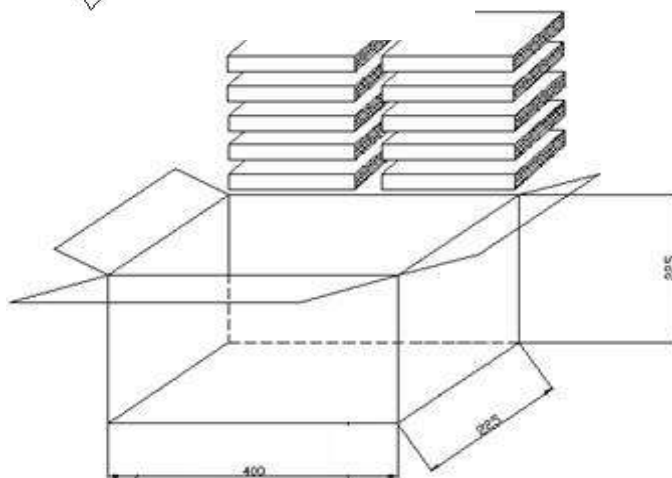
1 Reel=1 box



3. 外包装 (outside Package)

10 盒=1 箱

10 box=1 carton



仓储条件Storage conditions:

1、温度: $-10^{\circ}\text{C}\sim+40^{\circ}\text{C}$ Temperature: $-10^{\circ}\text{C}\sim+40^{\circ}\text{C}$

2、湿度: 45%~75% Humidity: 45%~75%

3、需要静电防护 Require electrostatic protection