

RoHS

# STANDARD SPECIFICATION

## 产品规格书

Customer: \_\_\_\_\_

Customer Part NO.: \_\_\_\_\_

Type & Freq: SX-3225 26.000MHZ 9PF ±10PPM

TKD Part NO.: SX32Y026000B91T

**Customer Approval :**

**(PLEASE RETURN A COPY WITH APPROVAL)**

HUBEI TKD ELECTRONICS TECHNOLOGY CO.,LTD.

**湖北泰晶电子科技股份有限公司**

SUIZHOU TAIWARD ELECTRONIC TECHNOLOGY CO.,LTD

**随州泰华电子科技有限公司**

| APPROVED  | CHECK  | DESIGNER  |
|-----------|--------|-----------|
| J. T Wang | Y Yang | Y. H Liao |

## REVISION

| Rev | Date       | NO. | Description of Revision History |
|-----|------------|-----|---------------------------------|
| 00  | 2017-08-23 |     | New Publication                 |

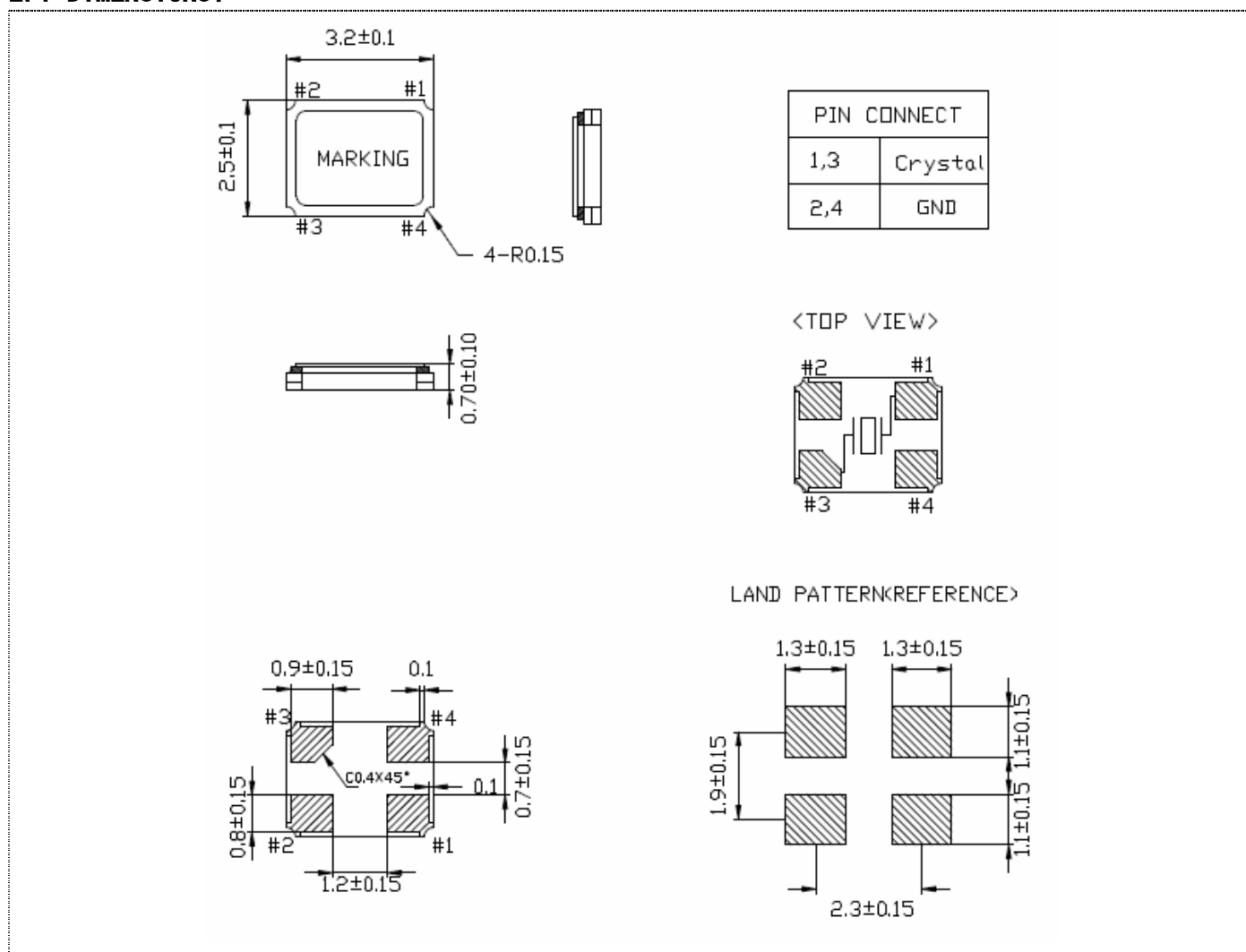


## ※ 1. QUARTZ CRYSTAL UNIT SPECIFICATION

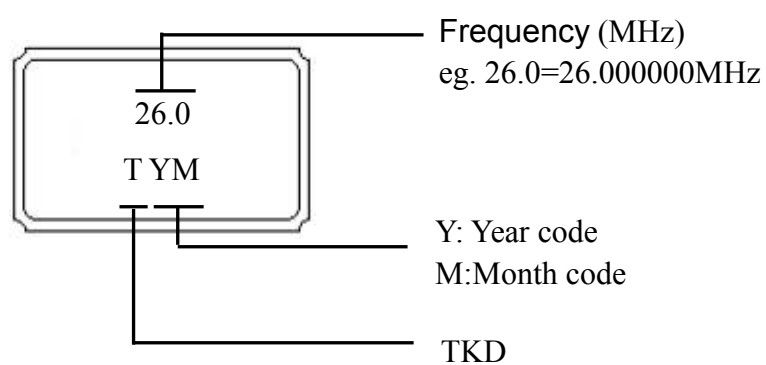
1. Frequency: 26.000000MHz
2. Holder type : SX-3225
3. Oscillation Mode: Fundamental
4. Cutting Mode AT cut
5. Measurement Instrument S&A 250B (Measured FL)
6. Frequency Tolerance:  $\pm 10$ ppm at  $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
7. Equivalent Series Resistance: 30  $\Omega$  Max.
8. Storage Temperature Range:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
9. Operating Temperature  $-20^{\circ}\text{C} \sim +75^{\circ}\text{C}$
10. Frequency Stability:  
Refer to Operating Temperature  $\pm 10$ PPM @  $-20^{\circ}\text{C} \sim +75^{\circ}\text{C}$
11. Drive Level: 100uW/Max
12. Load Capacitance (CL): 9pF
13. Shunt Capacitance: 3.0pF MAX
14. Insulation resistance : 500M $\Omega$  min /DC 100V
15. Aging:  $\pm 3$ ppm / Year
16. PACKING: 3000PCS / Reel
17. NOTE:

## ※ 2. DIMENSIONS & MARKING

### 2.1 DIMENSIONS:



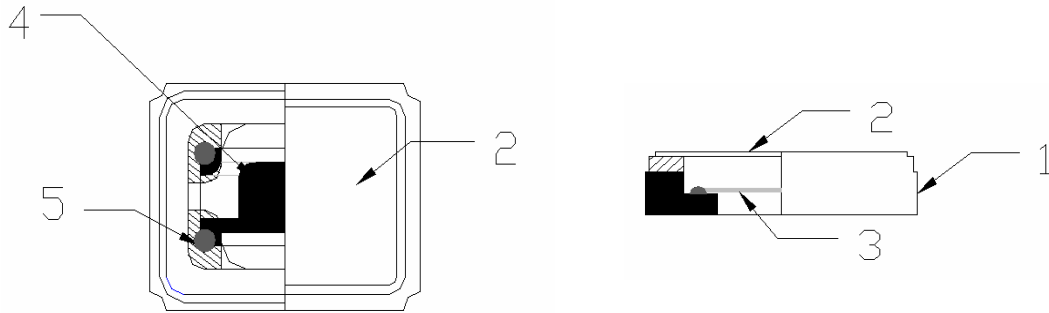
### 2.2 MARKING:



Year : 1 2 3 4 5 6 7 8 9 0

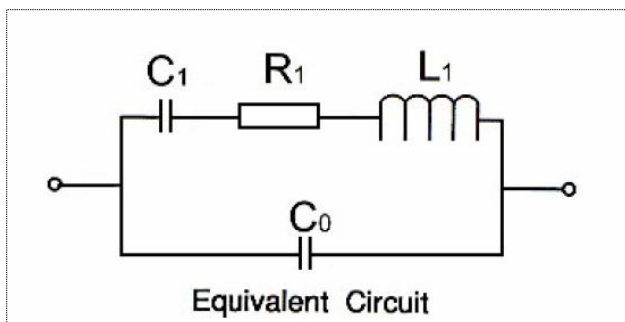
Month : 1 2 3 4 5 6 7 8 9 10 11 12    Code: A B C D E F G H J K L M

### ※ 3. INSIDE STRUCTURE

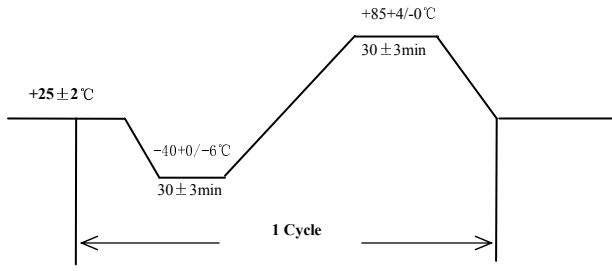
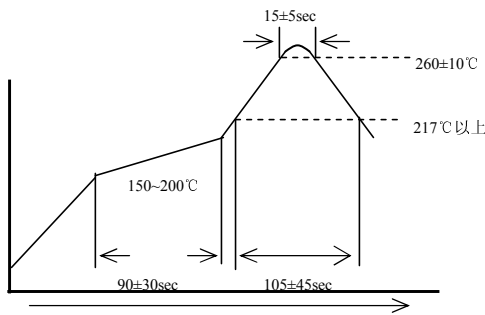


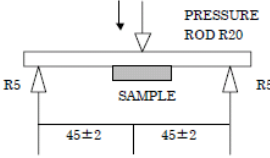
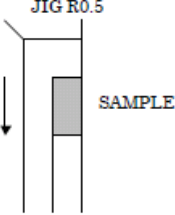
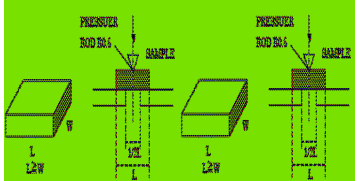
| No. | COMPONENTS    | MATERIALS                                 |
|-----|---------------|-------------------------------------------|
| 1   | Package       | Ceramic (Al <sub>2</sub> O <sub>3</sub> ) |
| 2   | LID           | KV(Fe/Co/Ni)                              |
| 3   | Crystal blank | SiO <sub>2</sub>                          |
| 4   | Electrode     | Noble Metal (Ag)                          |
| 5   | Adhesive      | Resin、Ag                                  |

### ※ 4. EQUIVALENT CIRCUIT



## ※ 5. RELIABILITY SPECIFICATION

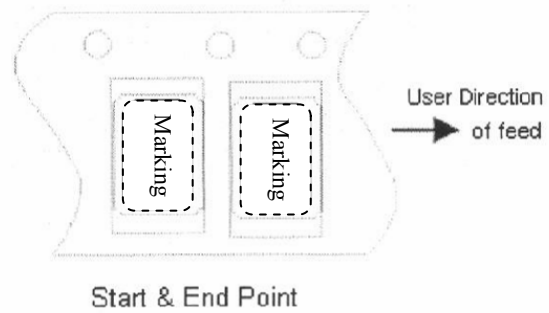
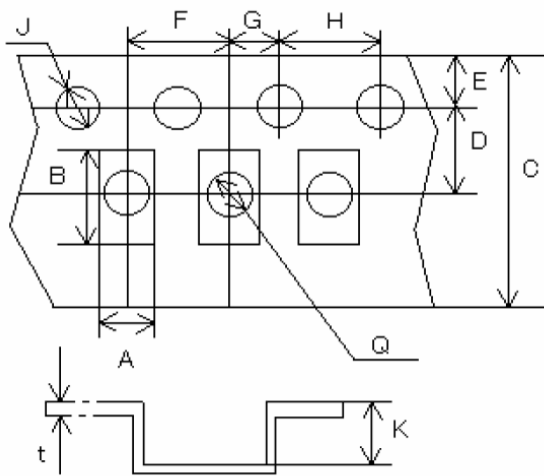
| REFER |                              | JIS C 6701                                                                                                                                                               |                                                      |
|-------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| NO.   | ITEM                         | CONDITIONS                                                                                                                                                               | BASIS OF VERDICT                                     |
| 1     | FREE FALL                    | FREE DROPPING FROM 75 cm HEIGHT 3 TIMES ON A HARD                                                                                                                        | F±5ppm<br>CI±15% or 5Ω                               |
| 2     | VIBRATION                    | FREQUENCY : 10~55Hz,<br>AMPLITUDE (TOTAL EXCURSION) : 1.5mm±15%,<br>SWEEP TIME : 1MIN, 3 DIRECTION(X, Y, Z) EACH FOR 2 Hrs.                                              | F±5ppm<br>CI±15% or 5Ω                               |
| 3     | TEMPERATURE CYCLE            | THE CRYSTAL UNIT SHALL BE SUBJECTED TO 100 SUCCESSIVE CHANGE OF TEMPERATURE CYCLES<br> | F±5ppm<br>CI±15% or 5Ω                               |
| 4     | FINE LEAK                    | HELIUM BOMBING 5.0~5.5 Kgf / cm <sup>2</sup> , FOR 2 HOURS.                                                                                                              | ≤1×10 <sup>-9</sup> Pa.m <sup>3</sup> /s             |
| 5     | RESISTANCE TO SOLDERING HEAT | PEAK: 260°C ± 10°C Time: 15±5 sec<br>                                                 | F±5ppm<br>CI±15% or 5Ω                               |
| 6     | SOLDERABILITY                | THE LEAD IS IMMERSSED IN A 260±5°C SOLDER BATH WITHIN 2±0.6 SECONDS.                                                                                                     | more than 95% of lead shall be covered by new solder |
| 7     | HIGH TEMP. & HUMIDITY        | STORED AT 60±2°C AND HUMIDITY 90~95% FOR 500±12 H.                                                                                                                       | F±5ppm<br>CI±15% or 5Ω                               |
| 8     | HIGH TEMPERATURE STORAGE     | STORED AT 85±2°C FOR 720±12H. ( If Customer's temperature request is higher than the standard, Temperature test must be done for customer requirements. )                | F±5ppm<br>CI±15% or 5Ω                               |

|    |                           |                                                                                                                                                                                                                                                  |                                            |
|----|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 9  | LOW TEMPERATURE STORAGE   | STORED AT $-40\pm 2^{\circ}\text{C}$ FOR $500\pm 12\text{H}$ . ( If Customer's temperature request is lower than the standard, Temperature test must be done for customer requirements. )                                                        | F $\pm$ 5ppm<br>CI $\pm$ 15% or 5 $\Omega$ |
| 10 | TERMINAL STRENGTH         | <p>SHALL BE PRESSURIZED AT A SPEED OF APPROX.0.5mm/sec IN THE DIRECTION INDICATED BY THE ARROW UNTIL THE BENDING WIDTH REACHES 3mm AND HELD FOR 5 SECONDS.</p>  | F $\pm$ 5ppm<br>CI $\pm$ 15% or 5 $\Omega$ |
| 11 | STICKING TENDENCY         | <p>A R0.5 JIG SHALL BE USED TO APPLY A 10N DEAD LOAD IN THE DIRECTION INDICATED BY THE ARROW TO THE ELEMENT AND RETAIN IT FOR 10 SECONDS.</p>                 | F $\pm$ 5ppm<br>CI $\pm$ 15% or 5 $\Omega$ |
| 12 | ELEMENT ASSEMBLY STRENGTH | <p>A R0.5 PRESSURIZED BAR SHALL BE USED TO APPLY A 10N LOAD IN THE CENTER OF ELEMENT AND RETAIN IT FOR 10 SECONDS.</p>                                        | F $\pm$ 5ppm<br>CI $\pm$ 15% or 5 $\Omega$ |



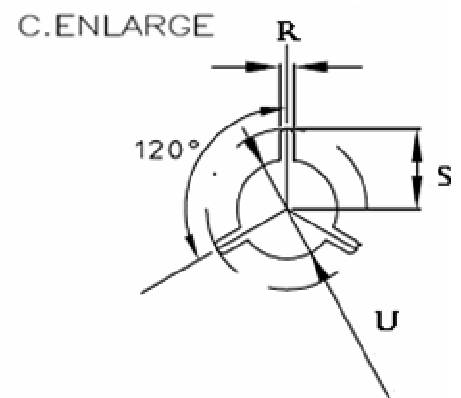
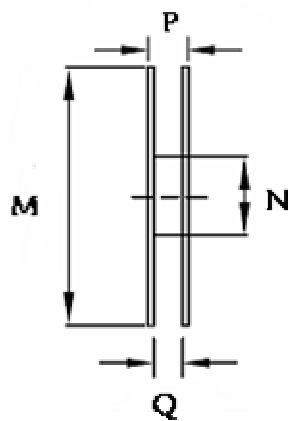
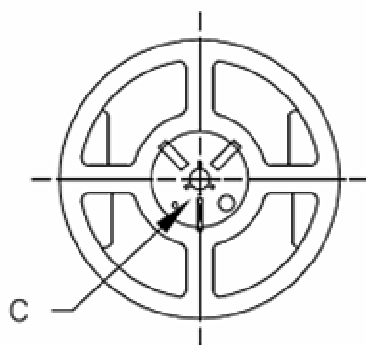
## ※ 6. PACKING

### 6.1 CARRIER TYPE (unit:mm)



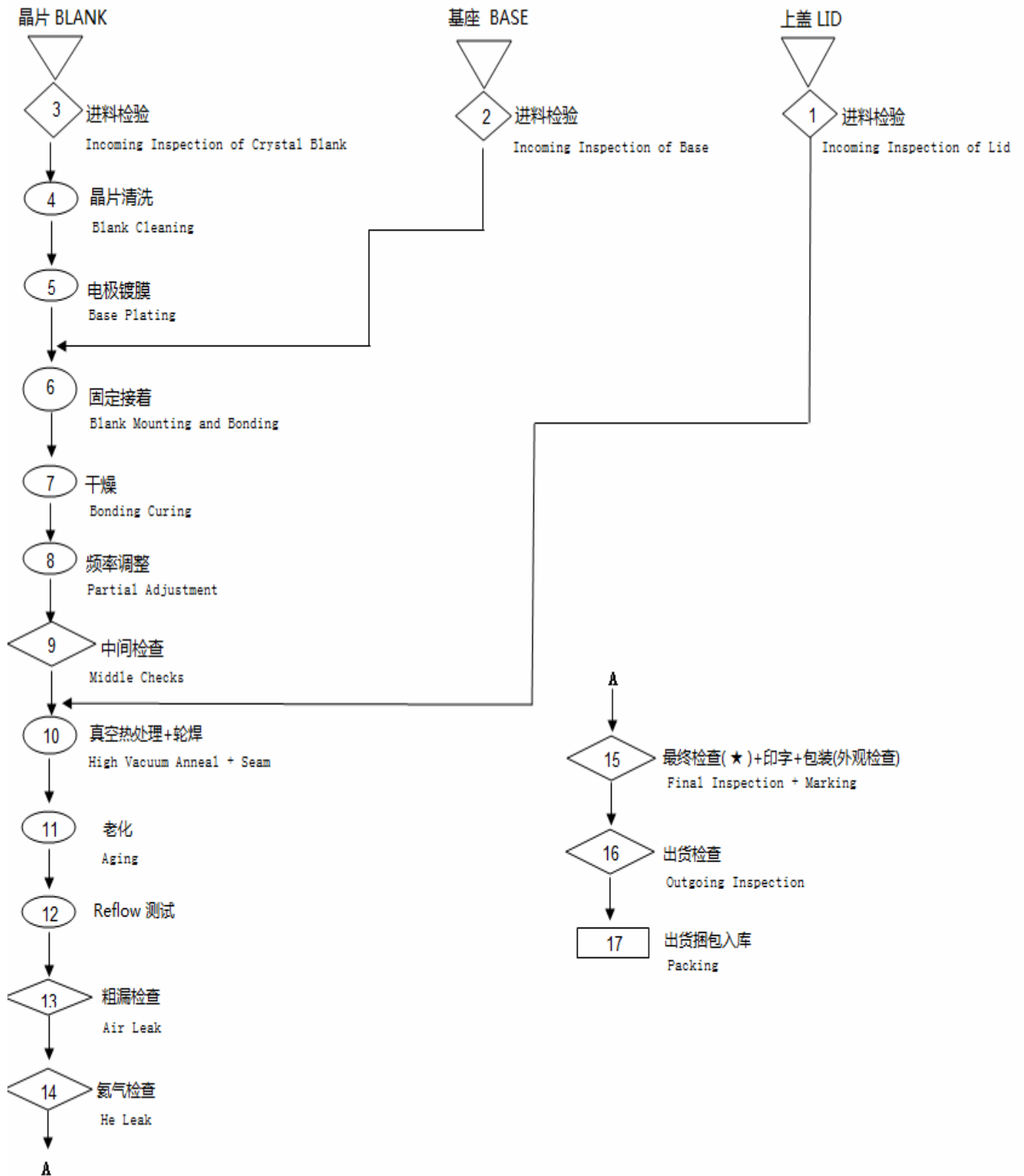
| A   | B   | C   | D   | E    | F   | G   | H   | J    | K   | t    |
|-----|-----|-----|-----|------|-----|-----|-----|------|-----|------|
| 2.7 | 3.4 | 8.0 | 3.5 | 1.75 | 4.0 | 2.0 | 4.0 | 1.55 | 1.4 | 0.25 |

### 6.2 REEL (unit:mm)



| M     | N    | P    | Q   | R   | S    | U    |
|-------|------|------|-----|-----|------|------|
| 178.0 | 60.2 | 11.5 | 8.0 | 2.5 | 11.0 | 13.0 |

## ※ 7. FLOW CHART



## ※ 8. HARMFUL SUBSTANCE CONTENT STATEMENT

### 随州泰华电子科技有限公司 SX-3225 产品 有毒有害物质或元素的名称及含量表

| 材料名称      | 有毒有害物质或元素 |        |        |                 |               |                 | 备注 |
|-----------|-----------|--------|--------|-----------------|---------------|-----------------|----|
|           | 铅 (Pb)    | 汞 (Hg) | 镉 (Cd) | 六价铬<br>(Cr(VI)) | 多溴联苯<br>(PBB) | 多溴二苯醚<br>(PBDE) |    |
| BLANK     | ND        | ND     | ND     | ND              | ND            | ND              |    |
| Package   | ND        | ND     | ND     | ND              | ND            | ND              |    |
| LID       | ND        | ND     | ND     | ND              | ND            | ND              |    |
| Electrode | ND        | ND     | ND     | ND              | ND            | ND              |    |
| Adhesive  | ND        | ND     | ND     | ND              | ND            | ND              |    |
| ... ..    |           |        |        |                 |               |                 |    |
| ... ..    |           |        |        |                 |               |                 |    |
| ... ..    |           |        |        |                 |               |                 |    |
| ... ..    |           |        |        |                 |               |                 |    |
| ... ..    |           |        |        |                 |               |                 |    |
| 拆分部件 n    |           |        |        |                 |               |                 |    |

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 规定的限量要求以下  
 ×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 规定的限量要求。  
 (供应商应将其原材料按要求进行拆分，并按照此表格进行详细标注,对不能满足标准要求的零部件进行具体的原因描述)