

# 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: Customer \_\_\_\_\_

货 名: Description SMD3225 石英晶体谐振器

客户料号: Part No \_\_\_\_\_

物料编号: Code No S32120000820A5D2

频 率: Frequency 12.000MHz

日 期: Date 2020-06-29

备 注: RoHS compliance with Directive (EU) 2015/863

制作(Prepare by)	检查(Check by)	批准 (Approve by)
江丹娜	甘瑛	张刚

客户批准 Approve by customer	
批准日期 Approval date	

Add: 广东省深圳市华发北路桑达工业区桑达雅苑 7P

7 P Sangda Yayuan Huafa North Road, Futian District, Shenzhen, Guangdong

Tel: 86-755-83048260

86-755-83048290

Fax: 86-755-83048280

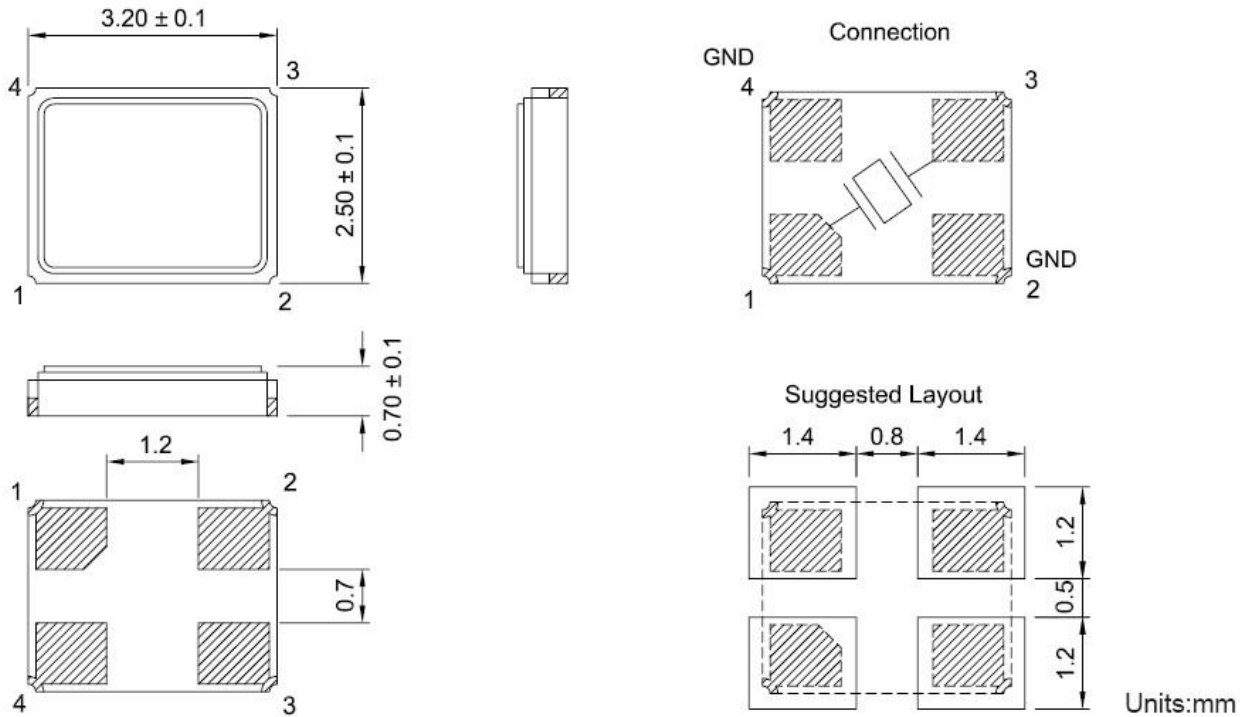
## 1、 Specifications

1	规格型号 Holder Type	SMD3225
2	标称频率 Nominal Frequency	12.000MHz
3	振动模式 Mode of Oscillation	Fundamental
4	调整频差 Frequency Tolerance at 25°C	±20ppm
5	温度频差 Temperature Frequency Stability	±20ppm
6	工作温度 Operating Temperature Range	-20~70°C
7	贮存温度 Storage Temperature Range	-40~90°C
8	负载电容 Load Capacitance	8pF
9	静电容 Shunt capacitance	≤7 pF
10	等效电阻 Equivalent Series Resistance	150 Ω Max
11	激励功率 Drive Level	10uW
12	绝缘阻抗 Insulation Resistance	500MΩ/100V±15V <sub>DC</sub>
13	年老化率 Aging	±3ppm/First year
14	测试仪器 Test machine	250B

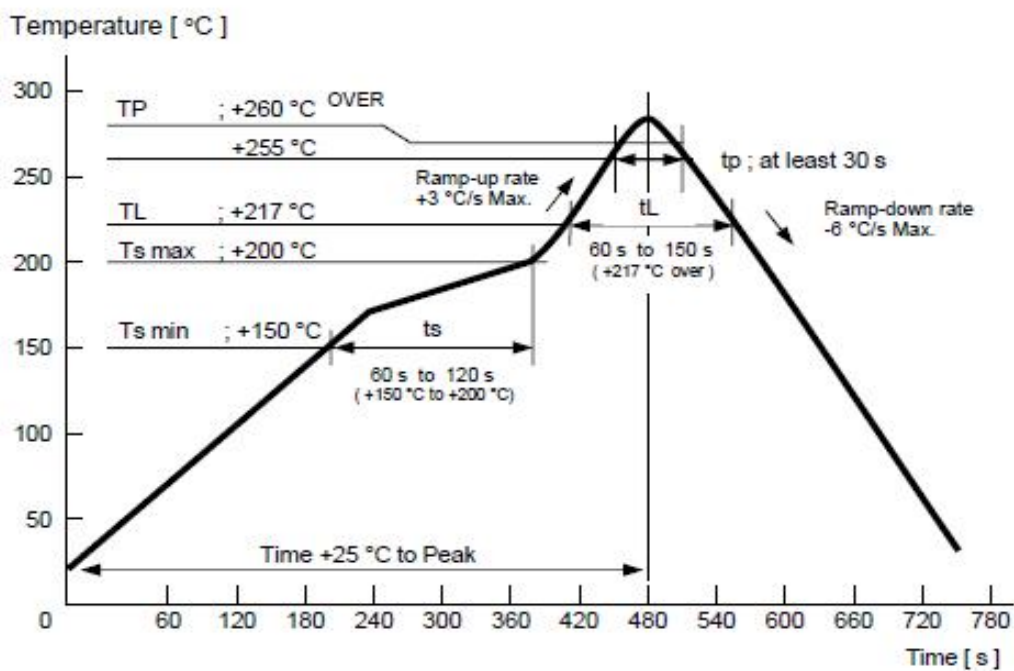
## 2. Frequency stability over temperature range (AT cut)

Temperature Range	Frequency Stability							
	±3PPM	±5PPM	±7.5PPM	±10PPM	±20PPM	±30PPM	±50PPM	±70PPM
0°C~+50°C	☆	☆	☆	☆	☆	☆	☆	☆
-10°C~+60°C			☆	☆	☆	☆	☆	☆
-20°C~+70°C				☆	★	☆	☆	☆
-30°C~+70°C					☆	☆	☆	☆
-40°C~+85°C					☆	☆	☆	☆
-40°C~+125°C						☆	☆	☆

### 3. Dimensions (unit:mm)



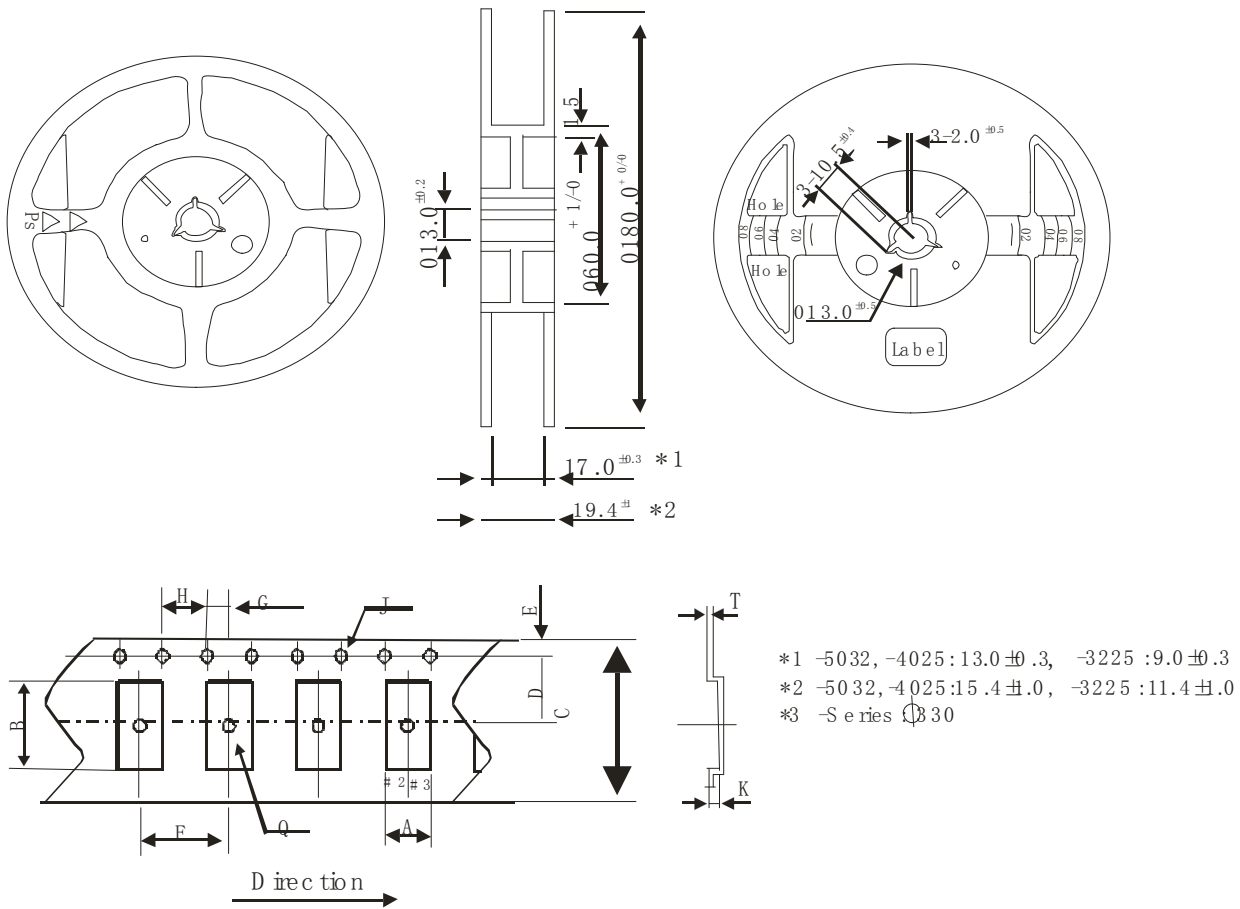
### 4.Recommended Reflow profile



## 5. Reliability specifications

NO	Item	Condition	Standard
1.	Drop Test	Free drop from 50cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.)	Frequency change: ≤5ppm Rr as specification
2.	Mechanical Shock	Half sine wave, 1000G, 0.5mS, three times for all 3 directions	Frequency change: ≤5ppm Rr as specification
3.	Vibration	Frequency range:10~55hz Amplitude:1.52mm Sweep time:1mintutes perpendicular axes each test time:2Hrs	Frequency change: ≤5ppm Rr as specification
4.	Solderability	Temperature:245℃ ± 5℃ Immersing depth:0.5mm minimum Immersion time:5 ± 1sec. Flux:Rosin resin methyl alcohol solvent(1:4)	90% exhibit tin ok
5.	Resistance to soldering heat	Test temperature:260℃ ± 5℃ Test time :10 ± 1sec.	Frequency change: ≤10ppm Rr as specification
6.	High Temp & Humidity	85±3℃ & RH85%, 500 ± 12 hours	Frequency change: ≤10ppm Rr as specification
7.	Low temperature storage	-40±3℃, 500 ± 12 hours	Frequency change: ≤10ppm Rr as specification
8.	High temperature storage	+85±3℃, 500 ± 12 hours	Frequency change: ≤10ppm Rr as specification
9.	Temperature cycling	-40±3℃/10min~+85±3℃/10min, 100cycles	Frequency change: ≤10ppm Rr as specification

## 6、Packaging standard

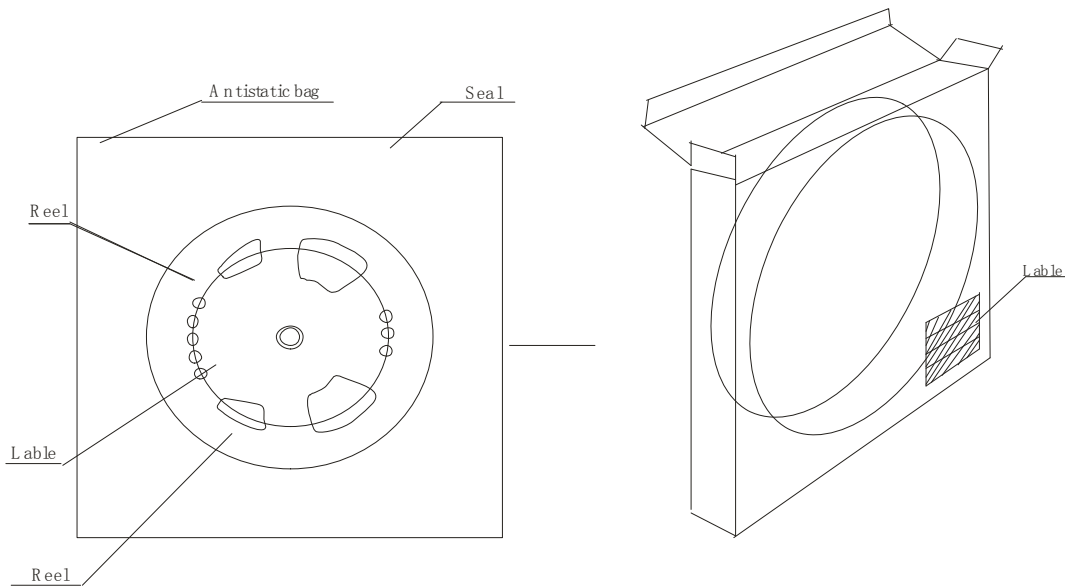


- Standard quantity of ST -3225 : 3,000 pcs/reel
- Standard quantity of SN -Series : 4,000 pcs/reel
- Standard quantity of others : 1,000 pcs/reel
- Carrier tape : Antistatic material (PS)
- Each reel can be recycled

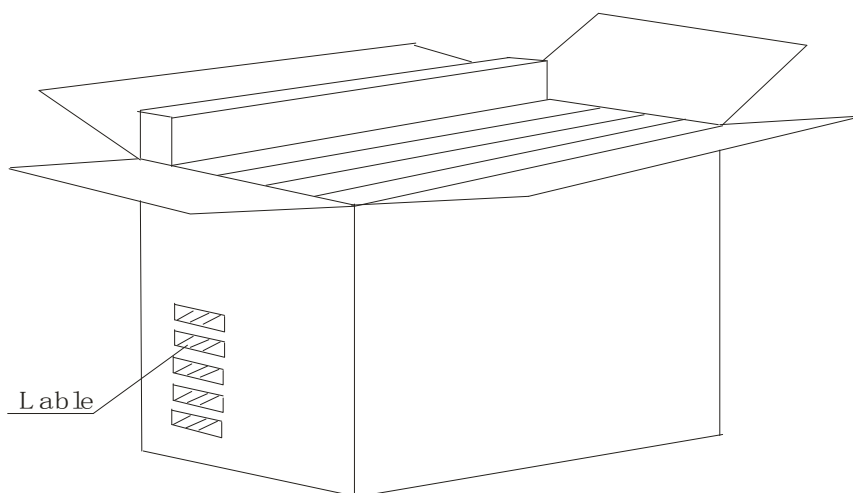
	SJ-7050 SN-7050	SJ-6032 SN-6032	SJ-5032	SJ -5032	SJ-4025	SJ-3225
A	5.4 <sup>±0.1</sup>	3.9 <sup>±0.1</sup>	3.5 <sup>±0.1</sup>	3.5 <sup>±0.1</sup>	2.9 <sup>±0.1</sup>	2.9 <sup>±0.1</sup>
B	7.4 <sup>±0.1</sup>	6.4 <sup>±0.1</sup>	5.4 <sup>±0.1</sup>	5.4 <sup>±0.1</sup>	4.4 <sup>±0.1</sup>	3.6 <sup>±0.1</sup>
C	16.0 <sup>±0.2</sup>	16.0 <sup>±0.2</sup>	12.0 <sup>±0.2</sup>	12.0 <sup>±0.2</sup>	10.0 <sup>±0.2</sup>	8.0 <sup>±0.2</sup>
D	7.5 <sup>±0.1</sup>	7.5 <sup>±0.1</sup>	5.5 <sup>±0.1</sup>	5.5 <sup>±0.1</sup>	5.5 <sup>±0.1</sup>	5.5 <sup>±0.1</sup>
E	1.75 <sup>±0.1</sup>	1.75 <sup>±0.1</sup>	1.75 <sup>±0.1</sup>	1.75 <sup>±0.1</sup>	1.75 <sup>±0.1</sup>	1.75 <sup>±0.1</sup>
F	8.0 <sup>±0.1</sup>	8.0 <sup>±0.1</sup>	8.0 <sup>±0.1</sup>	8.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>
G	2.0 <sup>±0.1</sup>	2.0 <sup>±0.1</sup>	2.0 <sup>±0.1</sup>	2.0 <sup>±0.1</sup>	2.0 <sup>±0.1</sup>	2.0 <sup>±0.1</sup>
H	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>	4.0 <sup>±0.1</sup>
J	1.55 <sup>±0.05</sup>	1.55 <sup>±0.05</sup>	1.5 <sup>+0.1/0</sup>	1.5 <sup>+0.1/0</sup>	1.5 <sup>±0.1/0</sup>	1.5 <sup>±0.1/0</sup>
K	1.4 <sup>±0.1</sup>	1.5 <sup>±0.1</sup>	1.0 <sup>±0.1</sup>	1.5 <sup>±0.1</sup>	0.9 <sup>±0.1</sup>	0.9 <sup>±0.1</sup>
Q	1.6 <sup>+0.1/0</sup>	1.55 <sup>±0.05</sup>	1.6 <sup>±0.1</sup>	1.6 <sup>±0.1</sup>	1.5 <sup>±0.1/0</sup>	1.5 <sup>±0.1/0</sup>
T	0.3 <sup>±0.05</sup>	0.3 <sup>±0.05</sup>	0.25 <sup>±0.05</sup>	0.25 <sup>±0.05</sup>	0.25 <sup>±0.05s</sup>	0.25 <sup>±0.05s</sup>

Item		Empty Space
Tapa Leader	Cover Tape	Min.500mm
	Empty Pockets	Min.20 pockets
Tape Trailer	Cover Tape	Min.0mm
	Empty Pockets	Min.40mm

**7. Inner carton**



**OUTET CARTON**



### 7-1. MARKING

- (1) Marking Labels are affixed to reel, inner carton and outer carton.
- (2) Each label contains the following information.
  - (a) Manufacture's name or symbol
  - (b) Parts name or type
  - (c) Frequency
  - (d) Quantity
  - (e) Reel number
  - (f) Manufacturer's code (EIAJ code)

### 7-2. QUANTITY

3000pcs/reel (max.5reels in outer carton)

### 7-3. STORAGE ENVIRONMENT

- ✧ Storage the reel at normal temperature and humidity
- ✧ Open the packing just before using
- ✧ Do not expose the sun
- ✧ Do not storage with some erosive chemicals
- ✧ Nothing is allowed to put on the reel or carton to prevent mechanical damage

### 7-4. HANDLING

- ✧ Handle with care to prevent the damage of tape, reel and products.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Resonators](#) category:*

*Click to view products by [JGHC](#) manufacturer:*

Other Similar products are found below :

[B39431R820H210](#) [CSAC2.00MGCM-TC](#) [ECS-HFR-40.00-B-TR](#) [CSTLS4M00G53Z-A0](#) [ZTB455E](#) [ECS-CR2-16.00-A-TR](#) [ECS-HFR-20.00-B-TR](#) [ECS-CR2-20.00-A-TR](#) [RO3164E-3](#) [ASR418S2-T](#) [CSTNE10M0G520000R0](#) [CSTLS8M00G53093-A0](#) [CSTNE12M0G52A000R0](#) [CSTLS18M4X54-A0](#) [CSTLS16M9X53Z-B0](#) [CSTLS24M0X51-A0](#) [CSTLS25M0X51-B0](#) [CSTLS18M0X51-B0](#) [CSTLS4M00G53093-A0](#) [CSTLS18M4X53-A0](#) [CSTNE16M0V510000R0](#) [CSTLS30M0X53-B0](#) [CSTLS33M8X53-B0](#) [CSTLS16M9X53-A0](#) [CSTLS6M40G56-B0](#) [CSTLS6M25G56-A0](#) [CSTNE14M7V510000R0](#) [CSTLS18M4X53-B0](#) [CSTLS33M0X51-B0](#) [CSTLS5M50G56-B0](#) [7B008000I01](#) [7D038400I01](#) [TAXM24M2ILDBET2T](#) [TAXM26M2IHDBET2T](#) [146-32.768-12.5-20-20/A](#) [3225-24.00-12-10-10/A](#) [7B009843M01](#) [CF4016M00009T8188042](#) [S32400001B0730D1JB](#) [X252016MLB4SI](#) [Q24FA20H00389](#) [CSTLS16M0X54-B0](#) [CSTLS4M19G56-B0](#) [9AC04194152080D2JB](#) [CST3.58MGW](#) [CSTCR4M91G55B-R0](#) [CSTLS3M68G56-B0](#) [S2100327072090](#) [FC-12M32.768KHZ9PF20PPM](#) [7Y032768NW2](#)