

承 认 书

SPECIFICATION FOR APPROVAL

客户名称: Customer _____

货 名: Description _____ SMD2016 石英晶体谐振器

客户料号: Part No _____

物料编号: Code No _____ S2132000081080

频 率: Frequency _____ 32.000MHZ

日 期: Date _____ 2023-04-14

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	

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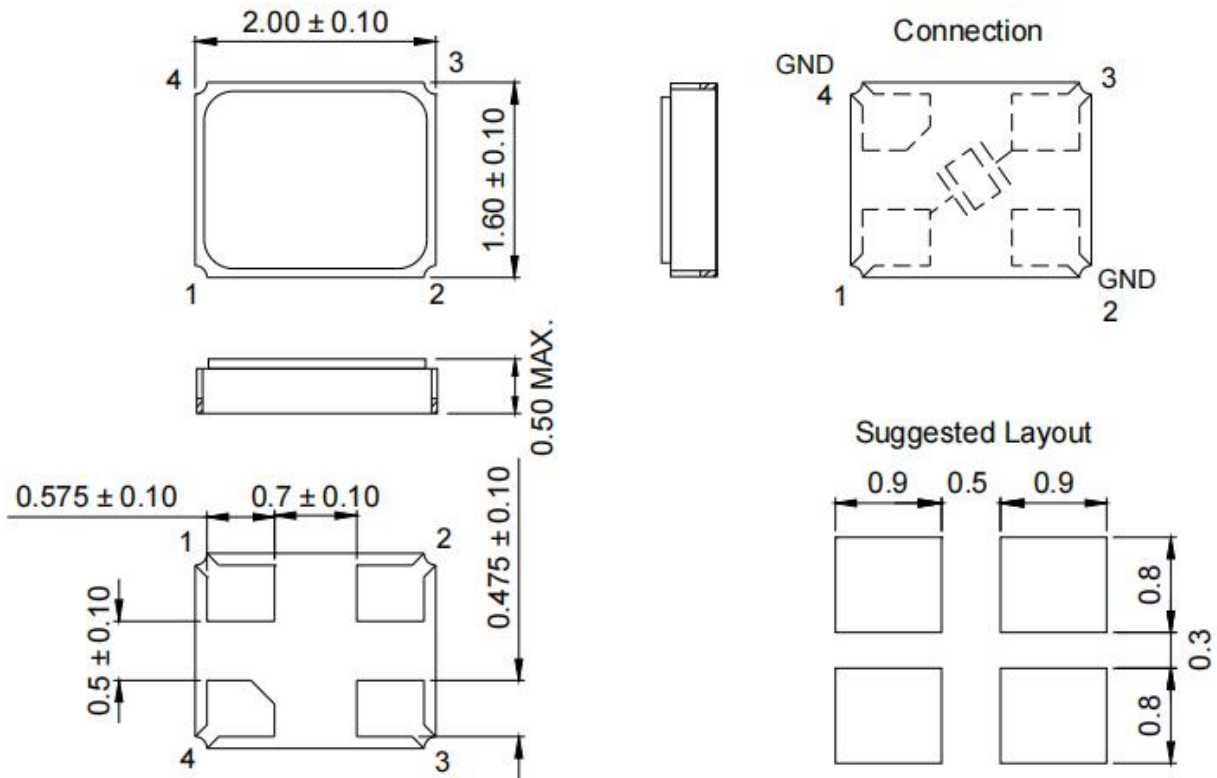
1、 Specifications

1	规格型号 Holder Type	SMD2016
2	标称频率 Nominal Frequency	32.000MHz
3	振动模式 Mode of Oscillation	Fundamental
4	调整频差 Frequency Tolerance at 25°C	±10ppm
5	温度频差 Temperature Frequency Stability	±30ppm
6	工作温度 Operating Temperature Range	-40~85°C
7	贮存温度 Storage Temperature Range	-40~90°C
8	负载电容 Load Capacitance	8 pF
9	静电容 Shunt capacitance	≤5 pF
10	等效电阻 Equivalent Series Resistance	80 Ω Max
11	激励功率 Drive Level	10uW
12	绝缘阻抗 Insulation Resistance	500MΩ/100V±15V _{DC}
13	年老化率 Aging	±3ppm/First year
14	测试仪器 Test machine	250B

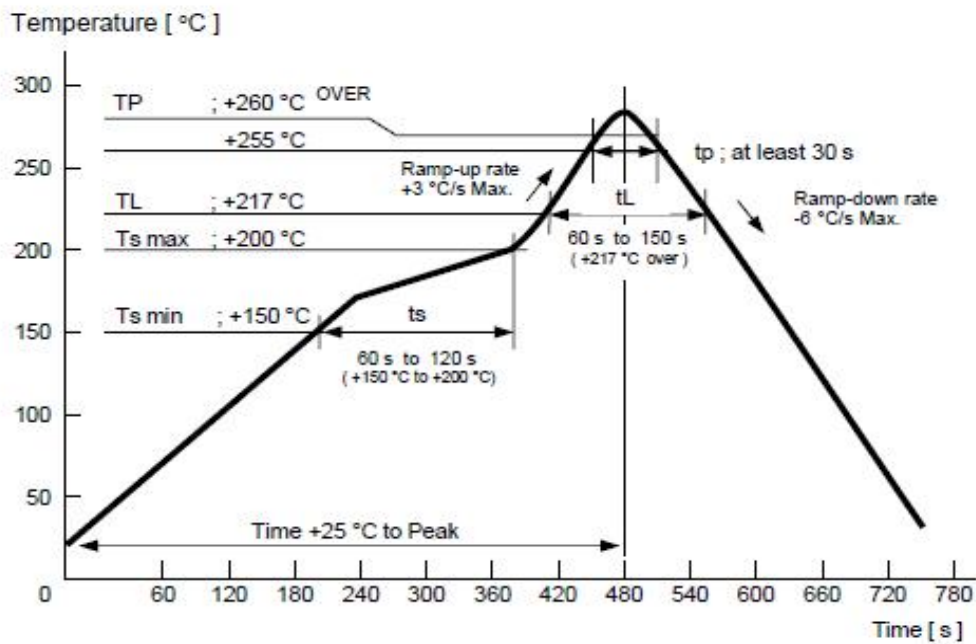
2. Frequency stability over temperature range (AT cut)

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

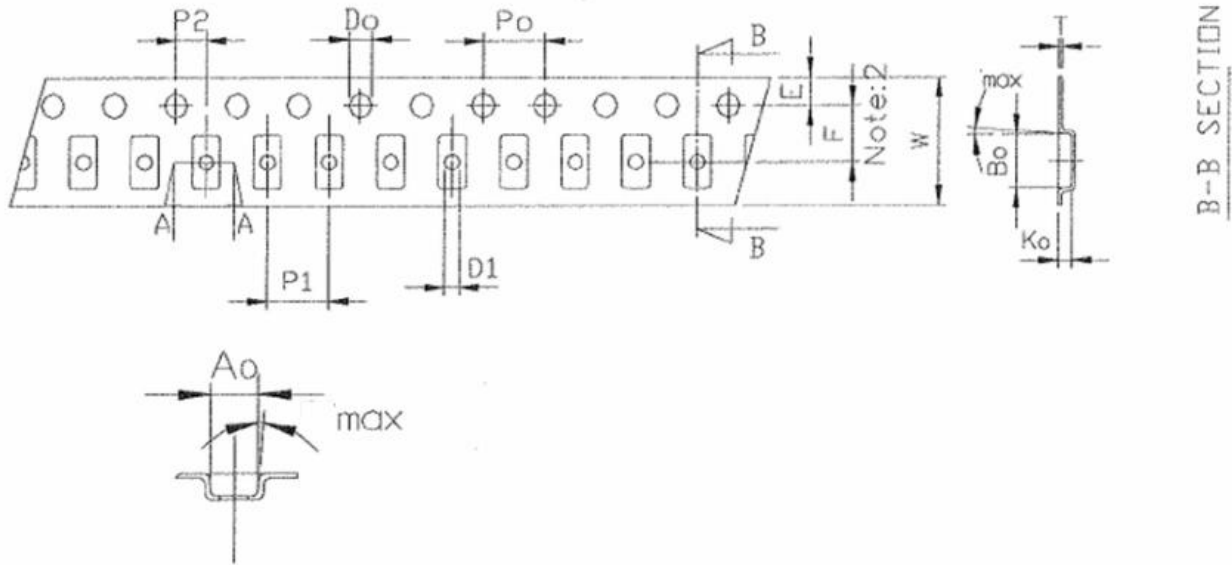


Pre-heat: $+150^\circ\text{C} \sim +200^\circ\text{C}$ $60 \sim 120$ sec. Heating: $+217^\circ\text{C}$ over $60 \sim 120$ sec.
 Peak temperature at least: 260°C $+255^\circ\text{C}$ over: minimum 30 sec.

5、Reliability specifications

NO	Item	Condition	Standard
1.	Drop Test	Free drop from 75 cm 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



Dimension PKG Type	Unit : mm						
	A0	B0	K0	T	W	E	F
2016(8mm)	1.9±0.1	2.3±0.1	0.65±0.1	0.25±0.05	8±0.3	1.75±0.2	3.5±0.1
	P1	P2	D1	D0	P0		
	4±0.1	2±0.1	1±0.05	1.55±0.05	4±0.1		

Standard Reel Quantity is 3,000 pcs per reel.

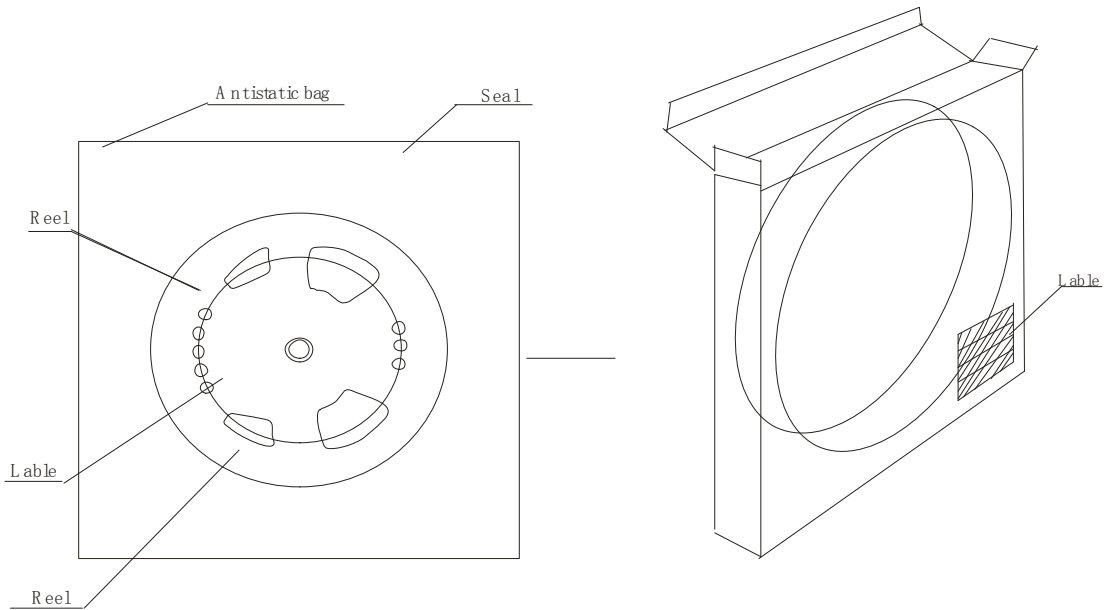
THE INSPECTION FOR TAPE TENSION

ITEM	Defect	Method
Appearance	ALL	1.The tape is not coincidence 2.The bubble
Tape Tension	8045、7050 6035-12mm 5032-12mm 3225-12mm	overstep 61±6g(55~67g)
	3225-8mm	overstep 40±5g(35~45g)
	2520-8mm	overstep 55±6g(49~61g)
	2016-8mm	overstep 34±6g(28~40g)
	1612-8mm	overstep 34±6g(28~40g)
	6035-16mm	overstep 60±6g(54~66g)
	5032-16mm	overstep 60±6g(54~66g)
		Visual inspection
		Pull test

REMARK : NA

7. Packaging standard

Inner carton



OUTER CARTON

