

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 _____ S21160000910150

频 率: Frequency _____ 16.000MHZ

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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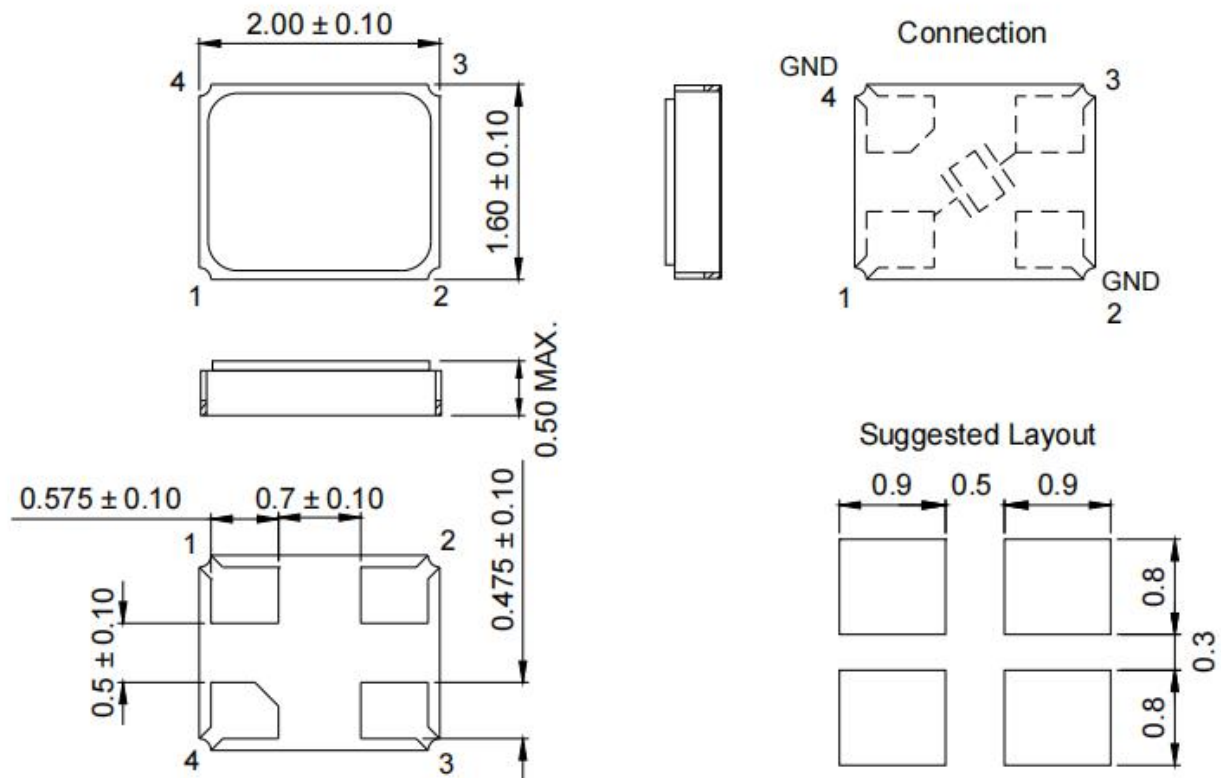
1、 Specifications

1	规格型号 Holder Type	SMD2016
2	标称频率 Nominal Frequency	16.000MHz
3	振动模式 Mode of Oscillation	Fundamental
4	调整频差 Frequency Tolerance at 25℃	±10ppm
5	温度频差 Temperature Frequency Stability	±30ppm
6	工作温度 Operating Temperature Range	-40~85℃
7	贮存温度 Storage Temperature Range	-40~90℃
8	负载电容 Load Capacitance	9 pF
9	静电容 Shunt capacitance	≤5 pF
10	等效电阻 Equivalent Series Resistance	100 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

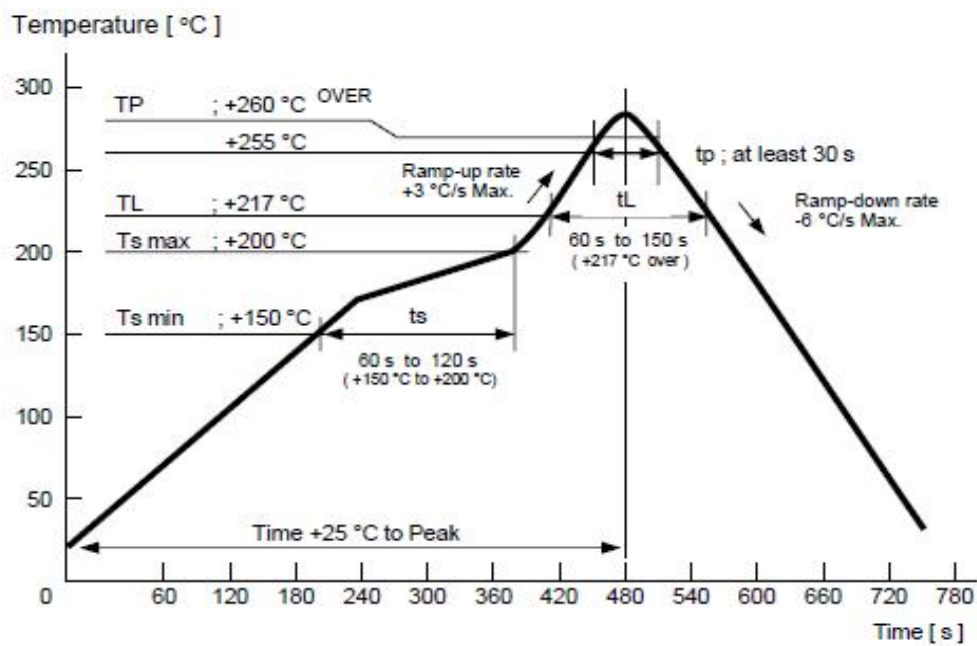
2. Frequency stability over temperature range (AT cut)

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

3. Dimensions (unit:mm)



4.Recommended Reflow profile

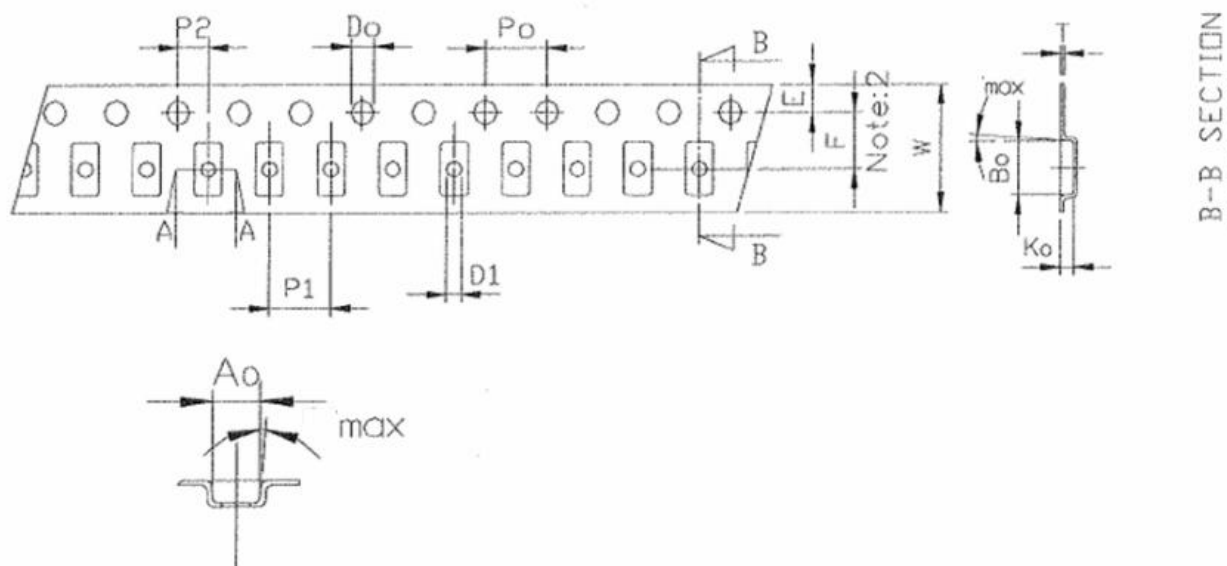


Pre-heat: +150~+200°C 60~120sec. Heating: +217°C over 60~120sec.
Peak temperature at least: 260°C +255 °C over: minimum 30ec.

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: $\leq 5\text{ppm}$ Rr as specification
2.	Mechanical Shock	Half sine wave, 1000G, 0.5mS, three times for all 3 directions	Frequency change: $\leq 5\text{ppm}$ Rr as specification
3.	Vibration	Frequency range:10~55hz Amplitude:1.52mm Sweep time:1mintutes perpendicular axes each test time:2Hrs	Frequency change: $\leq 5\text{ppm}$ Rr as specification
4.	Solderability	Temperature:245℃ $\pm$ 5℃ Immersing depth:0.5mm minimum Immersion time:5 $\pm$ 1sec. Flux:Rosin resin methyl alcohol solvent(1:4)	90% exhibit tin ok
5.	Resistance to soldering heat	Test temperature:260℃ $\pm$ 5℃ Test time :10 $\pm$ 1sec.	Frequency change: $\leq 10\text{ppm}$ Rr as specification
6.	High Temp & Humidity	85 $\pm$ 3℃ & RH85%, 500 $\pm$ 12 hours	Frequency change: $\leq 10\text{ppm}$ Rr as specification
7.	Low temperature storage	-40 $\pm$ 3℃, 500 $\pm$ 12 hours	Frequency change: $\leq 10\text{ppm}$ Rr as specification
8.	High temperature storage	+85 $\pm$ 3℃, 500 $\pm$ 12 hours	Frequency change: $\leq 10\text{ppm}$ Rr as specification
9.	Temperature cycling	-40 $\pm$ 3℃/10min~+85 $\pm$ 3℃/10min, 100cycles	Frequency change: $\leq 10\text{ppm}$ Rr as specification

6、Packaging standard



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.

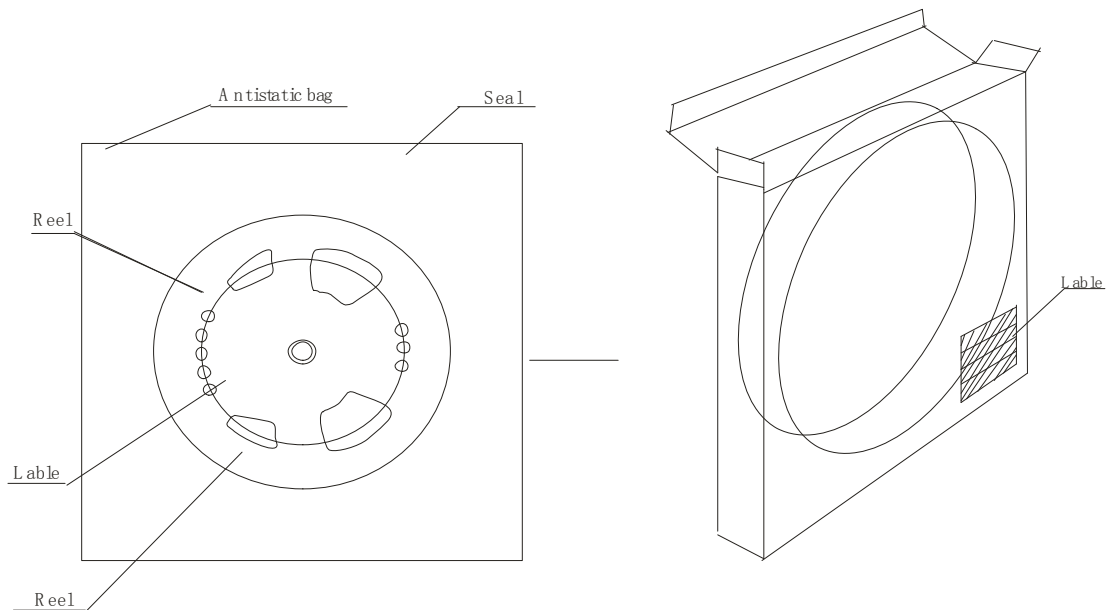
THE INSPECTION FOR TAPE TENSION

ITEM		Defect	Method
Appearance	ALL	1.The tape is not coincidence 2.The bubble	Visual inspection
Tape Tension	8045、7050 6035-12mm 5032-12mm 3225-12mm	overstep 61±6g(55~67g)	Pull test
	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		

REMARK : NA

7. Packaging standard

Inner carton



OUTER CARTON

