深圳市惠贻华普电子有限公司
HOPE MICROELECTRONICS CO.,LTD

样品承认书

SPECIFICATION FOR APPROVAL

客　　户:_____

Customer:_____

物料编号:_____

ModelNO:_____

产品规格: 3225 SMD 32.000MHZ-4P

Description:_____

石英晶体谐振器

NO: 20140408-01

产品型号：3225 SMD 32.000MHZ-4P

发送日期：2014-04-08

客户确认： (请在确认后盖单并返回一份)	批 准	
	审 核：	
	拟 制：	

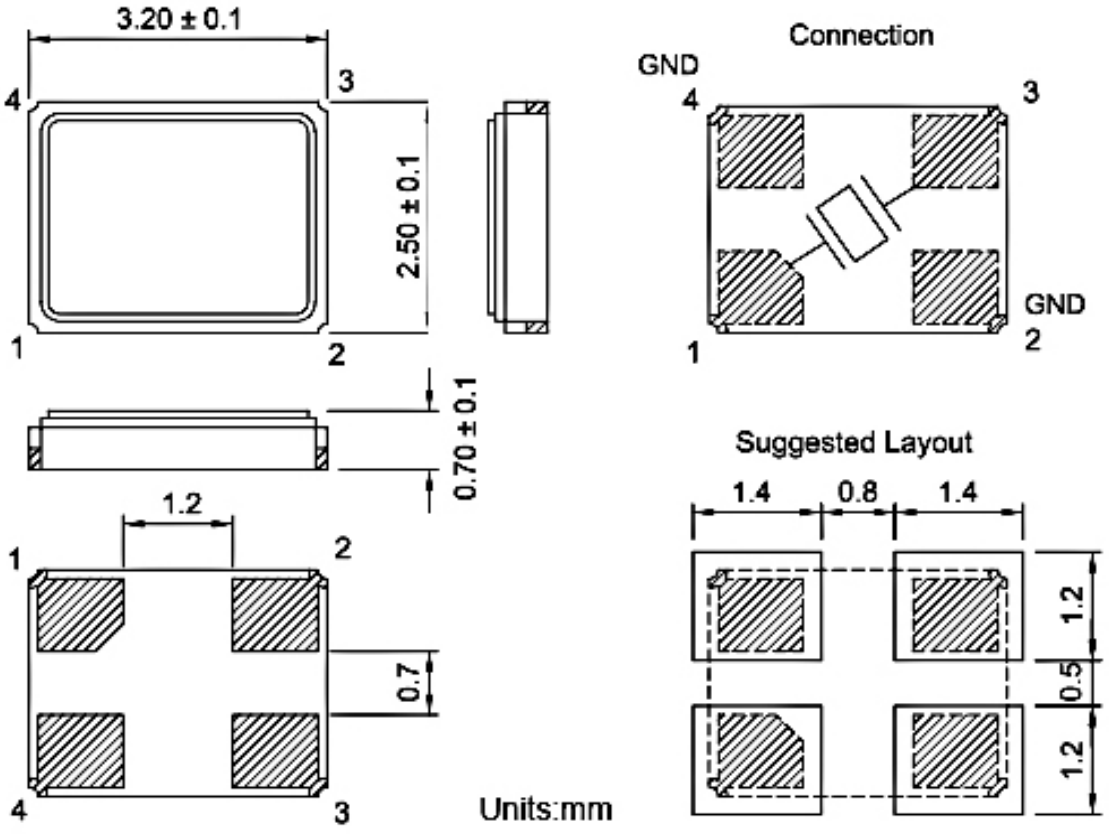
地址：广东省深圳市南山区西丽镇平山村民企科技园3栋2楼
Tel ： 0755- 82973805　　网址： http://www.hoperf.com
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1.Electrical characteristics

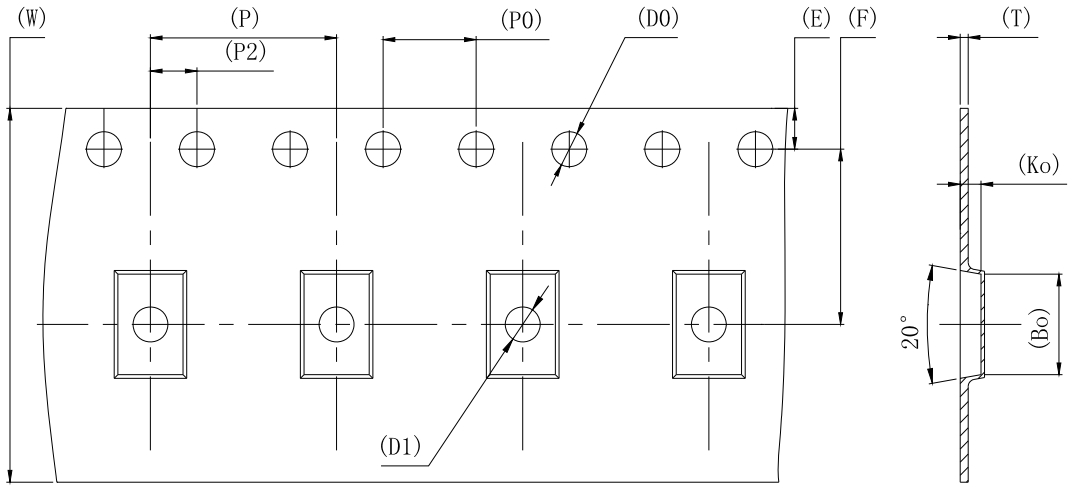
Type	**SMD3225-4P Crystal Resonator**
Nominal frequency:	**32.000000MHz**
Frequency tolerance at (25℃±3℃)	**≤±10ppm**
Mode of vibration	**FUND**
Load capacitance	**12pF**
Effective series resistance	**30Ω**
Shunt capacitance	**≤3pF**
Operating temperature range	**-40℃~+85℃**
Storage temperature range	**-40℃~+90℃**
Frequency stability vs. operating temperature	**≤±20ppm**
Drive level	**100μW**
Insulation resistance	**500MΩ/100V±15V_{DC}**
Aging	**≤±3ppm/First year**
Test machine	**S&A 250B**

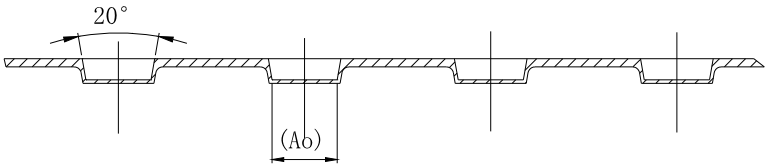
Remark: **Sample Data See Attachment**

2.Dimension (mm)



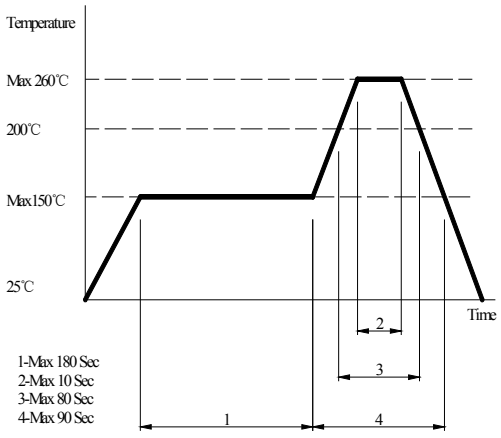
3.Packing Specification





W	16.00±0.05	P	8.00±0.10	A0	3.90±0.10	B0	6.40±0.10
S		P0	4.00±0.10	A1		B1	
E	1.75±0.10	P2	2.00±0.10			B2	
F	7.50±0.10	D0	ø1.50$^{+0.10}_{-0}$	K0	1.50±0.10		
T	0.35±0.05	D1	ø1.50 MIN	K1			

4.Reliability Specification

	Item	Condition	Standard
1	Drop characteristics	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	Shake characteristics	Shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes, test after 1 hours.	Frequency change: ≤5ppm Rr as specification
3	Airproof characteristics	Put crystal into the pressure cabin with alcohol, keep pressure 0.4~0.5mpa 10 minutes, then take out and blow for 5 minutes	IR≥500MΩ
4	Weld characteristics	335±5℃, 3 seconds	90% exhibit tin ok
5	Humidity characteristics	+40±2℃ & 90%~95% R.H. 250 hours	Frequency change: ≤5ppm Rr as specification
6	Low temperature characteristics	-30±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤5ppm Rr as specification
7	High temperature characteristics	+85±2℃, 250 hours, put in room temperature, test after 1 hours.	Frequency change: ≤5ppm Rr as specification
8	Temperature cycling	-30±3℃/30±3 min~+85±2℃/30±3min, 5 cycles	Frequency change: ≤5ppm Rr as specification
9	Refluence examination		Frequency change: ≤5ppm Rr as specification