

雅晶鑫電子

Shenzhen Yajingxin Electron Co.,Ltd

Customer	
Production Name	CRYSTAL SEAM 3.0*8.0
Customer P/N	
P/N	TAXD32768K2CRDBZT2S
Revision	
Print Date	2020/7/27



Drawn	Checked	Approved

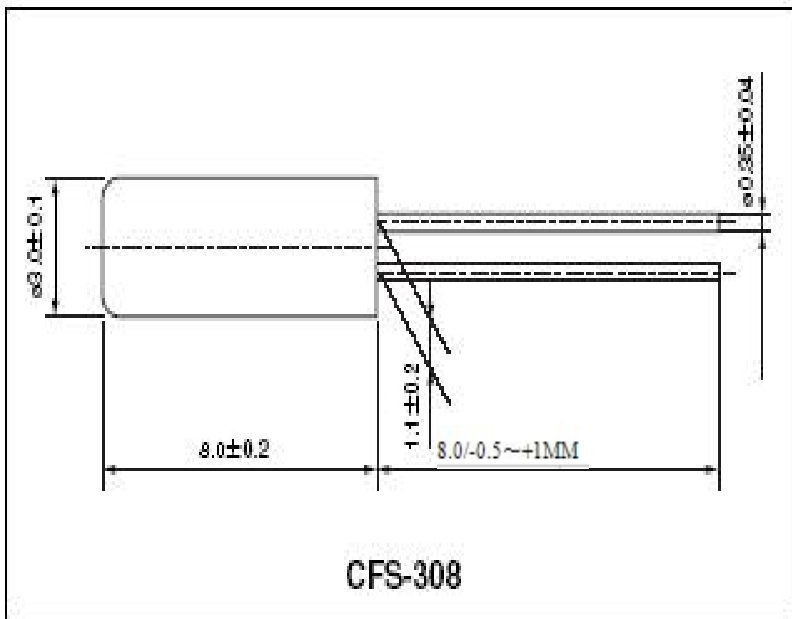


RoHS Compliant

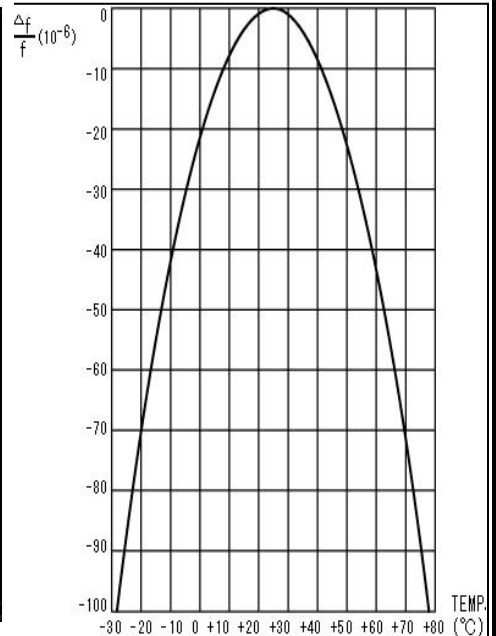
● ELECTRICAL PARAMETERS

谐振器产品技术指标		Min	Max	Units
1.Holder Type(型号规格)		SEAM 308		
3. Frequency (标称频率)		32.768000		KHz
4.Load Capacitance (CL) (负载电容)		6		pF
5.Drive Level (激励功率)		1.000		uw
6.Equivalent Resistance (谐振电阻)			30	KΩ
7.Shunt Capacitance (Co) (静态电容)		0	1.7	pF
8.Motional Capacitance (C1) (动态电容)		0.0028		fF
9.Frequency Tolerance at 25°C (调整频差)		-20	20	ppm
10.Temperature Coefficient 二次温度系数		[-0.035±0.01]ppm/°C		
11.Insulation Resistance (at DC 100V) (绝缘电阻)		500		MΩ
12.Operating Temperature Range (工作温度范围)		-20	70	°C
13. Storage Temperature Range (储存温度范围)		-40	85	°C
14. Aging (老化率)		± 5		ppm/year
15. DLD2	N/A		N/A	Ω
16. FLD2			N/A	ppm
17. RLD2			N/A	Ω
18. SPDB			N/A	db
19. Other(其它)		N/A		

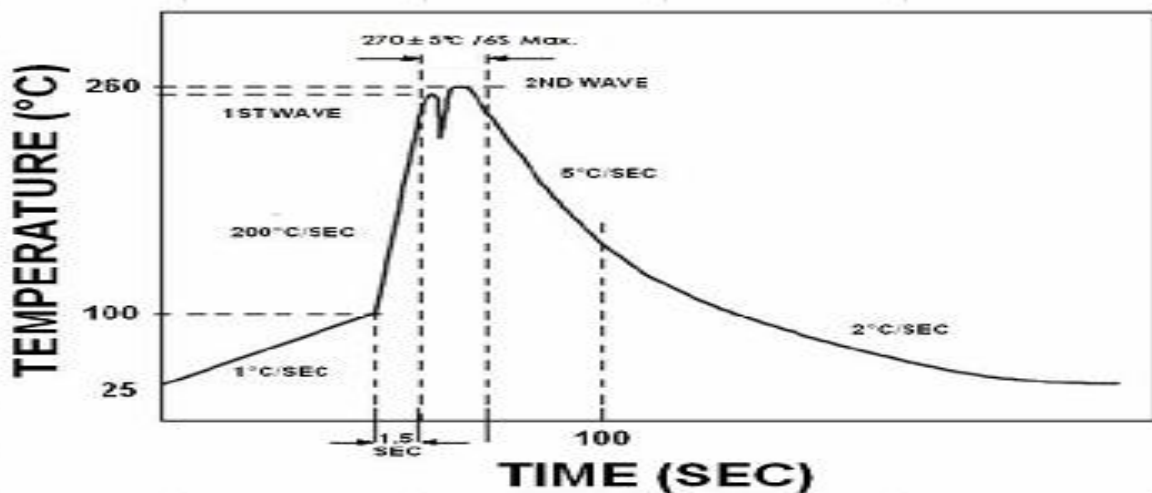
OUTLINE DIMENSIONS(UNIT:mm) 外形尺寸 (单位: mm)



FREQUENCY VS. TEMPERATURE CURVE



No.	Test Items	Test Method and Condition	Requirements
1	振動 Vibration	(1)振動頻率Vibration Frequency 10 to 55Hz	頻率變化最大:±10ppm
		(2)振動幅度Vibration Amplitude 1.5mm	Frequency Change:±10ppm Max.
		(3)周期 Cycle Time 1-2min(10-55-10Hz)	電阻變化最大:5kohm
		(4)振動方向Direction X.Y.Z	Resistance Change:5kohm Max.
		(5)振動時間Duration 2h/each direction	
2	衝擊 Shock	從75cm高的地方自由跌落3次到30mm厚的硬木板上	頻率變化最大:±10ppm
		3 Times free drop from 75cm height to hard wooden	Frequency Change:±10ppm Max.
		board of thickness more than 30mm	電阻變化最大:5kohm
			Resistance Change: 5kohm Max.
3	氣密性 Leakage	晶體放入氬加壓罐內，充入氬氣壓力0.5-0.6Mpa保持1小時;	漏氣率小於:1x10 <sup>-8</sup> mbar.l/s
		然後使用氬質譜檢漏儀測試。	Leakage:1x10 <sup>-8</sup> mbar.l/s Max.
		Put crystal units into a hermetic container and Helium for 0.5-0.6	
		Mpa,and keep it for 1h;Check the leakage by a Helium leak detector	
4	可焊性 Solderability	將引線浸入完全熔化的焊錫鍋內3-5s，焊錫溫度245℃±5℃	浸過引線面積的95%以上被新焊錫
		Put the leads of crystal units into solder melted tank for 3 to 5s	覆蓋The dipped surface of the leads
		Temperature of solder melted tank is 245℃±5℃	should be at least 95% covered with
5	手工焊接耐熱 Soldering iron resistance	350℃±10℃,3+1/-0 sec	頻率變化最大:±10ppm
			Frequency Change:±10ppm Max.
			電阻變化最大:10kohm
			Resistance Change: 10kohm Max.
6	波峰焊耐熱 Wave soldering	推荐使用下面的波峰焊溫度曲線進行波峰焊接。	
		The WAVE SOLDERING PROFILE as below is recommended:	



雅晶鑫電子

Shenzhen Yajingxin Electron Co.,Ltd

No.	Test Items	Test Method and Condition	Requirements
7	引線強度(引線直插式晶體) Lead Strength(DIP)	用0.9kg(9N)的力持續拉晶體引線30s±5s; 用0.45kg的力折引線成90°2次(折彎處離機體1.5mm以上); The crystal lead with the 0.9kg(9N)power(keep it for 30s±5s) and bend the crystal lead 90° with 0.45kg power and two times (which you want to bend should be more than 1.5mm from the case)	引線無異常 The crystal lead is not abnormality
8	耐高溫能力 High Temperature Endurance	晶體放置於85°C±2°C環境中2小時後，常溫放置1-2小時 The crystal units shall be put in somewhere for 2 hours at temperature of 85°C±2°C,then keep it for 1 to 2 hours under room temperature	頻率變化最大:±10ppm Frequency Change:±10ppm Max. 電阻變化最大:5kohm Resistance Change:5kohm Max.
9	耐低溫能力 Low Temperature Endurance	晶體放置於-25°C環境中2小時後，常溫放置1-2小時 The crystal units shall be put in somewhere for 2 hours at temperature of -25°C,then keep it for 1 to 2 hours under room temperature	
10	耐濕性 Humidity Endurance	晶體放置於40°C、相對濕度90-95%環境中48小時後，常溫放置1-2小時 The crystal units shall be put in somewhere at 40°C in relative humidity of 90-95% for 48 hours, then keep it for one or two hours under room temperature	
11	高低溫迴圈 Temperature Cycle	溫度從-40°C(保持30分鐘)升高到100°C(保持30分鐘)，再降到-40°C(保持30分鐘)然後回到室溫25°C完成一個迴圈，共計5個迴圈 Temperature shift from low(-40°C) to high(100°C,keep 30 minutes),satisfy high(100°C) to low(-40°C,keep 30 minutes),then go up to room temperature for 5 cycles	