

晶体谐振器 Crystal Resonator: KX2012 KX3215 KX3880 KX7015

Feature 特征

- Ultra-compact, thin, lightweight crystal unit 超小型，轻薄，轻量化贴片 32.768kHz 谐振器
- Excellent electrical characteristics, ideal for portable electronic products, frequency sources 优异的电性能，适用于便携电子设备，频率源等。

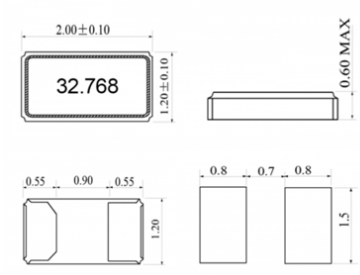
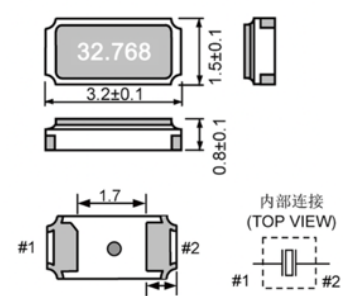
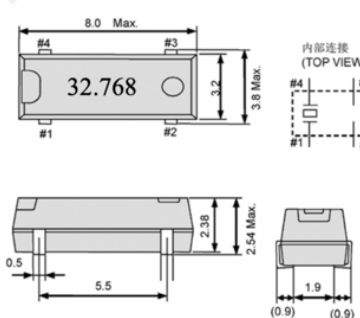
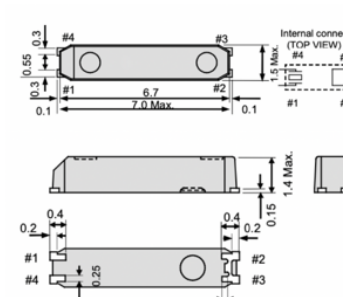


General Specifications 规格参考

PARAMETER	性能参数	KX2012	KX3215	KX3880	KX7015
Frequency Range	频率范围	32.768 kHz			
Oscillation Mode	振荡方式	基频			
Frequency Tolerance (25°C±3°C)	调整频差	±5ppm ~ ±20ppm			
Load Capacitance	负载电容	7, 9, 12.5pF	6, 12.5pF	6, 12.5pF	6, 12.5pF
Frequency Stability	温度频差	-0.04ppm * (T - 25) ²			
Operating Temperature Range	温度范围	-40°C ~ +85°C			
Equivalent Series Resistance	谐振电阻	60~80 KΩ	50~80 KΩ	30~50 KΩ	40~50 KΩ
Drive Level	激励电平	0.1μW typical, 0.5μW max			
Shunt Capacitance	静电容	3pF max	3pF max	3pF max	2.5pF max
Insulation Resistance	绝缘电阻	500MΩ min			
Storage Temperature Range	储存温度范围	-55°C to +125°C			
Aging Per Year	老化率	±3ppm/year max			
Temperature Coefficient	频率温度系数	0.04ppm/°C ² max			
Turnover Temperature	拐点温度	25°C ± 5°C			

NOTE: Please consult for other specifications 若有其它规格需求请告知

Outline Dimensions (Unit: mm) 外形尺寸

KX2012		KX3215 
KX3880		KX7015 

Part Number Guide 产品编号

KX2012	-	32.768	-	F	-	12.5	-	C	-	15	-	NS
↓		↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	振荡方式	-	负载	-	工作温度	-	调整频差	-	特殊要求

'KX': 产品系列

'2012': 封装尺寸

kHz

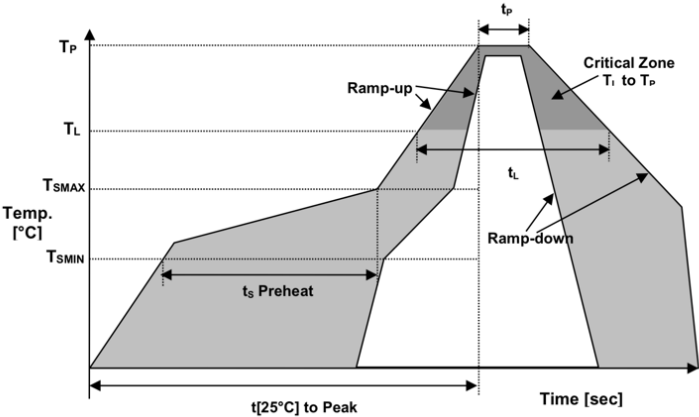
(In KHz)

F-基频

C: -40~+85°C

05 = ±5ppm
10 = ±10ppm
15 = ±15ppm
20 = ±20ppm

Reflow Profile 回流焊



Temperature Min Preheat	最低预热温度	Tsmin	150°C
Temperature Max preheat	最高预热温度	Tsmax	200°C
Time (Tsmin to Tsmax)	时间差	Ts	60~120 sec
Temperature	温度	TL	217°C
Peak Temperature	最高温	TP	260 °C
Ramp-up Rate	升温速度	Rup	3°C/sec max
Ramp-down Rate	降温速度	Rdown	6°C/sec max
Time within 5°C of Peak Temperature	最高温度停留时间	tp	30 sec
Time t[25°C] to peak temperature	25度到最高温度时间	t[25°C] to peak	480 sec
Time	时间	tL	60~150 sec

Revision 版本

版本 Rev.	修改页 Revise Page	修改内容 Revise Contents	日期 Date	修改人 Reviser
0	N/A	Initial issue	2020.09.27	JZ