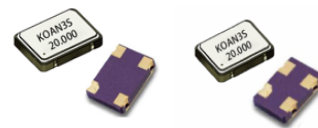


时钟振荡器 Clock Oscillator: KS3225 KS5032 KS7050

Feature 特征

- Miniature package for space-saving designs 小型封装，节省空间
- Compatible with CMOS and TTL logic circuits for versatile integration 兼容 CMOS/TTL 逻辑电路
- Standards tri-state output 标准三态输出
- Available in multiple voltage options to suit different system requirements 多电压选择，满足不同系统需求



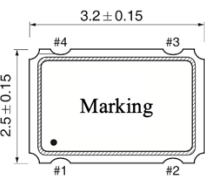
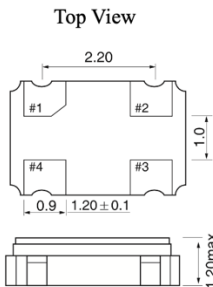
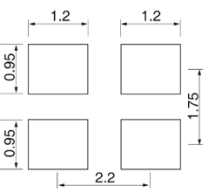
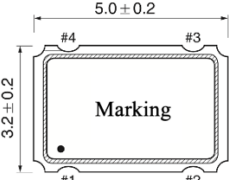
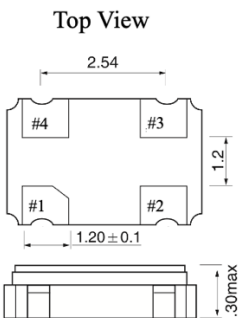
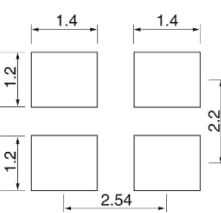
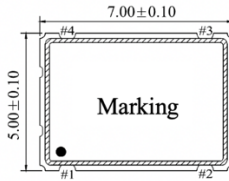
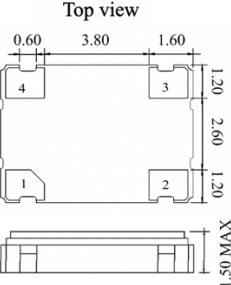
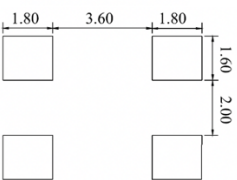
General Specifications 规格参考

PARAMETER	性能参数	KS3225 KS5032 KS7050		
Frequency Range	频率范围	32.768KHz, 14KHz~100KHz		
Supply Voltage	供给电压	+1.8V (±10%)	+2.5V(±10%)	+3.3V(±10%)
Output Logic	输出波形	CMOS		
Frequency Tolerance	调整频差	±5ppm ~ ±30ppm		
Frequency Stability	温度频差	见下表		
Operating Temperature Range	温度范围	见下表		
Current Consumption	工作电流	40μA typ.; 60μA max		
Output Load	输出负载	15pF		
Start-up Time	起振时间	30ms max		
Duty Cycle	占空比	45~55%		
Rise & Fall Time	上升下降时间	30ns max		
Output Logic High "1"	输出电平 高	0.9Vdd min		
Output Logic Low "0"	输出电平 低	0.1Vdd max		
Storage Temperature Range	储存温度范围	-55°C ~ +125°C		
Aging Per Year	年老化率	±3ppm ~ ±5ppm/year		

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围						
Temp. Code	Temp.\ppm	±10	±20	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
D	-55~85°C			○	○	○
E	-55~105°C				○	○
F	-55~125°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

KS3225	  																				
KS5032	  																				
KS7050	  																				
	<table><tr><th>Pin</th><th>Connection</th></tr><tr><td>#1</td><td>Output Enable (OE)</td></tr><tr><td>#2</td><td>Ground</td></tr><tr><td>#3</td><td>Output</td></tr><tr><td>#4</td><td>Supply Voltage</td></tr></table><table><tr><th colspan="2">Enable/Disable Function</th></tr><tr><th>Input (#1)</th><th>Output (#3)</th></tr><tr><td>Open</td><td>Enable</td></tr><tr><td>V_{IH} ≥ 70%V_{dd}</td><td>Enable</td></tr><tr><td>V_{IL} ≤ 30%V_{dd}</td><td>Disable</td></tr></table>	Pin	Connection	#1	Output Enable (OE)	#2	Ground	#3	Output	#4	Supply Voltage	Enable/Disable Function		Input (#1)	Output (#3)	Open	Enable	V _{IH} ≥ 70%V _{dd}	Enable	V _{IL} ≤ 30%V _{dd}	Disable
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Part Number Guide 产品编号

KS3225	-	32.768	-	33	-	C	-	30	-	NS
↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求

‘KS’: 非差分系列

‘3225’:封装尺寸

SMD3.2x2.5mm

kHz

(In kHz)

18=1.8V

25=2.5V

33=3.3V

B: -20~+70°C

C: -40~+85°C

D: -55~+85°C

E: -55~+105°C

F: -55~+125°C

10 = ±10ppm

20 = ±20ppm

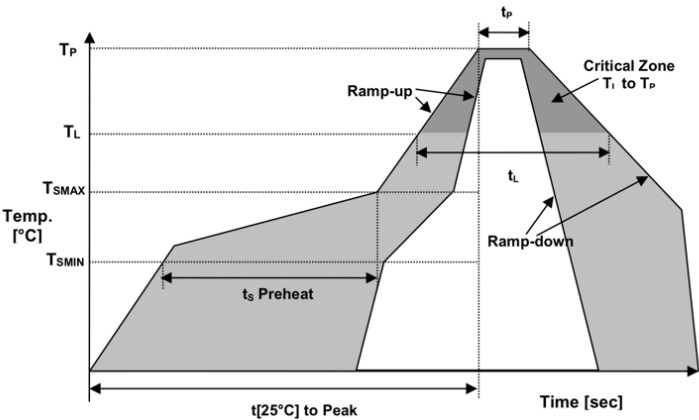
30 = ±30ppm

50 = ±50ppm

100 = ±100ppm

‘NS’:特殊要求

Reflow Profile 回流焊



Temperature Min Preheat	最低预热温度	T _{smin}	150°C
Temperature Max preheat	最高预热温度	T _{smax}	200°C
Time (T _{smin} to T _{smax})	时间差	T _s	60~120 sec
Temperature	温度	T _L	217°C
Peak Temperature	最高温	T _p	260 °C
Ramp-up Rate	升温速度	R _{up}	3°C/sec max
Ramp-down Rate	降温速度	R _{down}	6°C/sec max
Time within 5°C of Peak Temperature	最高温度停留时间	t _p	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	t _L	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
1.0	2	Pin description	2022.06.20	JZ