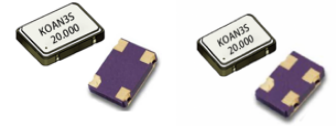


时钟振荡器 Clock Oscillator: KS2520 KS3225 KS5032 KS7050

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	KS2520 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	5mA 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	0.9V _{dd} min.		
Output Logic Low "0"	输出电平 低	0.1V _{dd} max.		
Storage Temperature Range	储存温度范围	-55°C ~ +125°C		
Aging Per Year	老化率	±3ppm ~ ±5ppm/year		

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围

Temp. Code	Temp.\ppm	±20	±25	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
E	-40~105°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

<p>KS2520</p>		<p>Recommended Soldering Pattern</p>																				
<p>KS3225</p>		<p>Recommended Soldering Pattern</p>																				
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	<table border="1" style="width: 100%;"> <thead> <tr> <th>Pin</th> <th>Connection</th> <th colspan="2">Enable/Disable Function</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Output Enable (OE)</td> <td>Input (#1)</td> <td>Output (#3)</td> </tr> <tr> <td>#2</td> <td>Ground</td> <td>Open</td> <td>Enable</td> </tr> <tr> <td>#3</td> <td>Output</td> <td>$V_{IH} \geq 70\%V_{dd}$</td> <td>Enable</td> </tr> <tr> <td>#4</td> <td>Supply Voltage</td> <td>$V_{IL} \leq 30\%V_{dd}$</td> <td>Disable</td> </tr> </tbody> </table>		Pin	Connection	Enable/Disable Function		#1	Output Enable (OE)	Input (#1)	Output (#3)	#2	Ground	Open	Enable	#3	Output	$V_{IH} \geq 70\%V_{dd}$	Enable	#4	Supply Voltage	$V_{IL} \leq 30\%V_{dd}$	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)

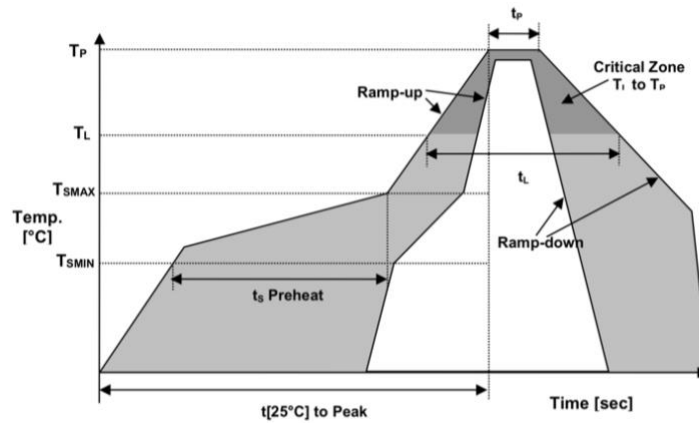
18=1.8V
 25=2.5V
 33=3.3V

B: -20~+70°C
 C: -40~+85°C
 E: -40~+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 $t[25^\circ\text{C}]$ to peak temperature	25度到最高温度时间	$t[25^\circ\text{C}]$ to peak	480 sec
Time	时间	t_L	60~150 sec