

Clock Oscillator (时钟振荡器) - KS3225 KS5032 KS7050



Feature 特征

Low power consumption 低功率消耗

Applications 应用

Computer control, railway measurement and control, intelligent systems, instrument, frequency sources 电脑控制, 铁路测控, 智能系统, 仪器仪表, 频率源等

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	0.9V _{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	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

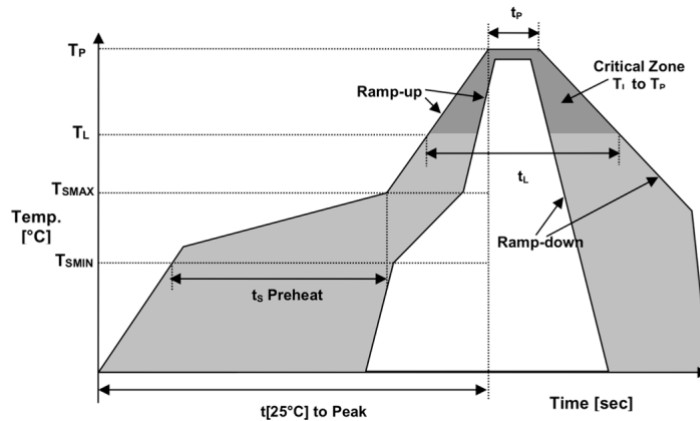
Outline Dimensions (Unit: mm) 外形尺寸

<p>KS3225</p>		<p>Top view</p>	<p>Recommended Soldering Pattern</p>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Connection</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Tri-State</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> </tbody> </table>	Pin	Connection	#1	Tri-State	#2	Ground	#3	Output	#4	Supply Voltage
Pin	Connection													
#1	Tri-State													
#2	Ground													
#3	Output													
#4	Supply Voltage													
<p>KS5032</p>		<p>Top view</p>	<p>Recommended Soldering Pattern</p>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Connection</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Tri-State</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> </tbody> </table>	Pin	Connection	#1	Tri-State	#2	Ground	#3	Output	#4	Supply Voltage
Pin	Connection													
#1	Tri-State													
#2	Ground													
#3	Output													
#4	Supply Voltage													
<p>KS7050</p>		<p>Top view</p>	<p>Recommended Soldering Pattern</p>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Connection</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Tri-State</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> </tbody> </table>	Pin	Connection	#1	Tri-State	#2	Ground	#3	Output	#4	Supply Voltage
Pin	Connection													
#1	Tri-State													
#2	Ground													
#3	Output													
#4	Supply Voltage													

Part Number Guide 产品编号

KS3225	-	32.768	-	33	-	C	-	30	-	
封装	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求
'KS':产品系列 '3225':封装尺寸 SMD 3.2x2.5mm 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	2021.12.27	JH