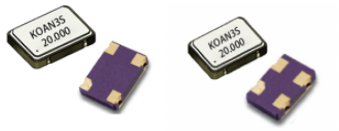
时钟振荡器 Clock Oscillator: KJ25 KJ32 KJ50 KJ70

Feature 特征



- Ultra-low phase noise 48fsec (RMS 12KHz~20MHz) at 3.3V 超低相位噪声
- Miniature package for space-saving designs 小型封装，节省空间
- 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

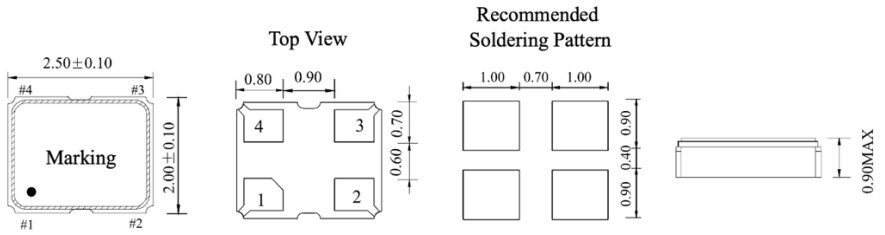
PARAMETER	性能参数	KJ25 KJ32 KJ50 KJ70
Frequency Range	频率范围	20MHz ~ 50MHz
Supply Voltage	供给电压	+1.8V/2.5V/3.3V (±10%)
Output Logic	输出波形	CMOS
Frequency Tolerance	调整频差	±5ppm ~ ±30ppm
Frequency Stability	温度频差	见下表
Operating Temperature Range	温度范围	见下表
Current Consumption	工作电流	10mA max
Output Load	输出负载	15pF
Start-up Time	起振时间	1ms typ.; 5ms max
Duty Cycle	占空比	45~55%
Rise & Fall Time	上升下降时间	5ns max (typ. @1.8V)
Output Logic High "1" Output Logic Low "0"	输出电平 高 输出电平 低	0.9Vdd min 0.1Vdd max
Output Enable/Disable	启动/禁用时间	Enable: 1ms max.; Disable: 200ns max.
RMS Jitter [49.152MHz@3.3V]	抖动	48 fsec typ.; 300 fsec max [12KHz~20MHz]
Phase Noise[49.152MHz@3.3V]	相位噪声	-91dBc@10Hz; -126dBc@100Hz [49.152MHz@3.3V]
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				○	○

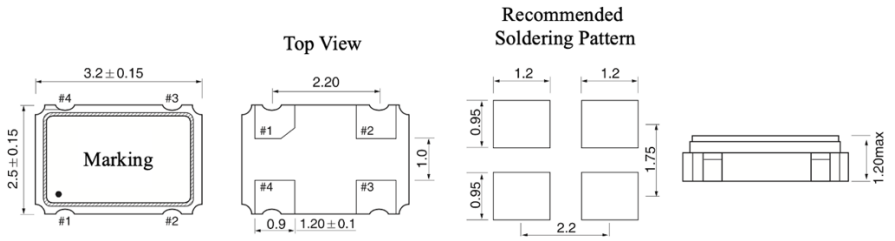
NOTE: Please consult for other specifications 若有其它规格需求请告知

■ Outline Dimensions (Unit: mm) 外形尺寸

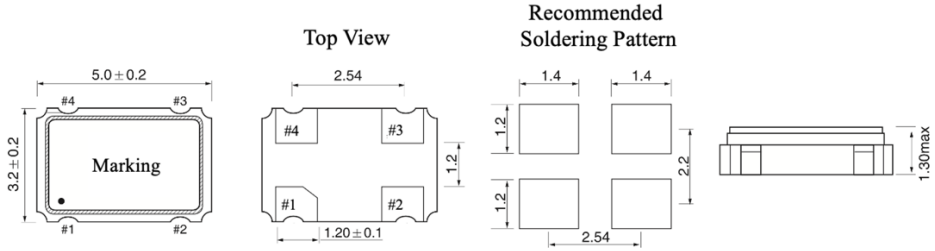
KJ25



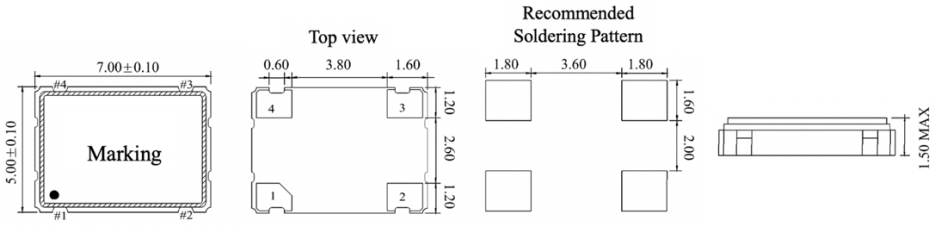
KJ32



KJ50



KJ70



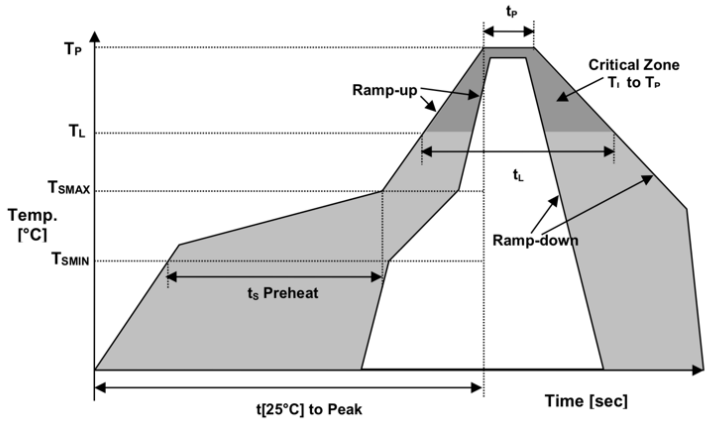
Pin	Connection
#1	Output Enable (OE)
#2	Ground
#3	Output
#4	Supply Voltage

Enable/Disable Function	
Input (#1)	Output (#3)
Open	Enable
V_{IH} ≥70%V_{dd}	Enable
V_{IL} ≤30%V_{dd}	Disable

■ Part Number Guide 产品编号

KJ25	-	20.000	-	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
'KJ': 低抖动系列 **'25':**封装尺寸 SMD2.5x2.0mm		(In MHz)		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