KOAN®

Product Information 产品介绍

时钟振荡器 Clock Oscillator: KS506T

Feature 特征

- High Frequency CMOS output Programmable Clock Oscillator 超高频 CMOS 输出可编程时钟振荡器
- Low phase jitter 9.8ps RMS typical (12kHz~20MHz) 低相位抖动
- Fast lead time and flexible delivery options to meet time-critical project needs 交货交期短，满足紧急项目要求
- Ideal for clocking in networking, telecom, industrial, and consumer electronics 适用于网络，电信，工业控制，消费电子

General Specifications 规格参考

PARAMETER	性能参数	KS506T
Frequency Range	频率范围	10MHz ~ 245MHz
Supply Voltage	供给电压	+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	50mA max.
Output Load	输出负载	15pF
Start-up Time	起振时间	10ms max.
Duty Cycle	占空比	45~55% (f≤40MHz); 40~60% (f > 40MHz)
Rise & Fall Time	上升下降时间	3ns max.
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 Time	启动/禁用时间	Enable: 200ns max.; Disable: 50ns max.
RMS Jitter	抖动	0.8ps typ. (12KHz~20MHz)
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	±20	±25	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
E	-40~105°C				○	○
F	-55~125°C					○

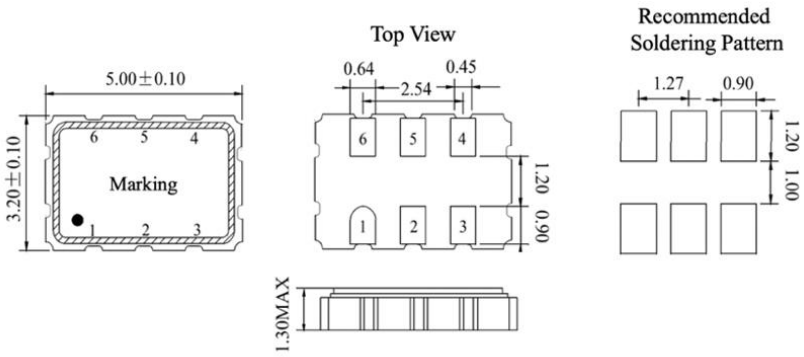
NOTE: Please consult for other specifications 若有其它规格需求请告知

Part Number Guide 产品编号

KS506T	-	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
'KS': 非差分系列 **'506':**封装尺寸 SMD 5.0x3.2mm 6 pad **'T'**: 输出波形 CMOS		(In MHz)		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

Outline Dimensions (Unit: mm) 外形尺寸

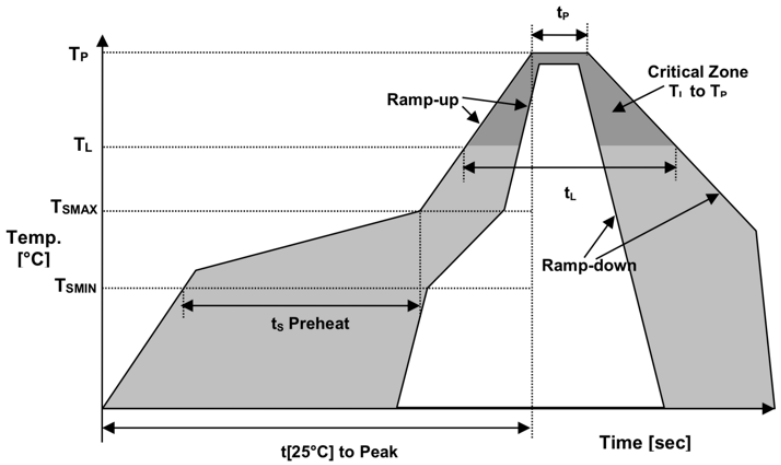
KS506T



Pin	Connection
#1	Output Enable (OE)
#2	No Connection
#3	Ground
#4	Output
#5	Complementary
#6	Supply Voltage

Enable/Disable Function	
Input (#1)	Output (#4, #5)
Open	Enable
V_{IH} ≥70%V_{dd}	Enable
V_{IL} ≤30%V_{dd}	Disable

■ 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