

压控振荡器 Voltage Controlled Crystal Oscillator: KV08 KV14

Feature 特征

- VCXO allow for precise frequency tuning over typical range $\pm 80\sim 200\text{ppm}$ by adjusting the voltage on the control (Vc) pin 压控晶振可以通过调节控制引脚上的电压进行微调, 频率微调范围为 $\pm 80\sim \pm 200\text{ppm}$
- Ideal for systems requiring frequency alignment and synchronization 适用于频率同步和微调系统



General Specifications 规格参考

PARAMETER	性能参数	KV08 KV14	
Frequency Range	频率范围	4.0~50.0MHz	
Supply Voltage	供给电压	+3.3V ($\pm 10\%$)	+5.0V ($\pm 10\%$)
Center Control Voltage	中心控制电压	1.65Vdc (0.3V~3.0V)	2.5Vdc (0.5V~4.5V)
Output Logic	输出波形	CMOS	
Output Load	输出负载	15pF	
Frequency Tolerance	调整频差	$\pm 20\text{ppm}$	
Current Consumption	工作电流	40mA 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.	
Frequency Pulling Range	压控范围	$\pm 80\sim \pm 200\text{ppm}$	
Integrated Phase Jitter	抖动	1ps max. (12KHz~20MHz)	
Input Impedance	输入电阻	5M Ω typical	
Rise & Fall Time	上升下降时间	5ns max.	
Start-up Time	起振时间	10ms max.	
Output Enable/Disable Time	启动/禁用时间	Enable: 2ms max. Disable: 100ns max.	
Linearity	非线性误差	$\pm 6\%$ typical, $\pm 10\%$ max.	
Duty Cycle	占空比	45~55% ($f \leq 40\text{MHz}$); 40~60% ($f > 40\text{MHz}$)	
Modulation Bandwidth (-3dB)	调制宽带	10KHz min. ($V_{\text{control}}=1.65\text{V}/2.5\text{V}$)	
Aging Per Year	老化率	$\pm 3\text{ppm}\sim \pm 5\text{ppm}/\text{year}$	
Storage Temperature Range	储存温度范围	$-55^\circ\text{C} \sim +125^\circ\text{C}$	

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

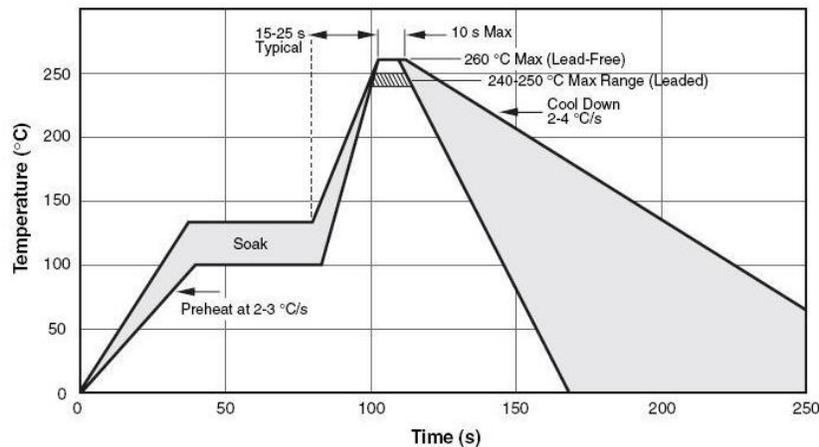
Outline Dimensions (Unit: mm) 外形尺寸

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Part Number Guide 产品编号

<u>KV08</u>	-	<u>27.000</u>	-	<u>80</u>	-	<u>33</u>	-	<u>C</u>	-	<u>30</u>	-	<u>NS</u>
↓		↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	压控范围	-	工作电压	-	工作温度	-	温度频差	-	特殊要求
‘KV’: 压控系列		(In MHz)		80=±80ppm 100=±100ppm 150=±150ppm 200=±200ppm		33=3.3V 50=5.0V		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

Wave Solder Profile 波峰焊



Average Ramp-up Rate	升温速度	~200°C/Second
Heating Rate during preheat	预热速度	1~2°C/second typ.; 4°C/second max
Final Preheat Temperature Ts	最终预热温度	~130°C
Peak Temperature Tp	最高温度	260°C
Time within +0°C/-5°C of actual temperature tp	实际温度时间	10 seconds
Ramp-Down Rate	降温速度	5°C/second max