

Voltage Controlled Clock Oscillator (压控振荡器) - KV08/KV14

Feature 特征

Frequency pulling range from $\pm 80 \sim \pm 200$ ppm 压控范围 $\pm 80 \sim \pm 200$ ppm

Applications 应用

Frequency electrical calibration, high-frequency network application system, military anti-interference communication 频率电校准, 高频网络应用系统, 军事防干扰通讯



General Specifications 规格参考

PARAMETER	性能参数	KV08 KV14	
Frequency Range	频率范围	4.000~50.000MHz	
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	± 20 ppm	
Current Consumption	工作电流	20mA 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	$\pm 80 \sim \pm 200$ 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	4ns typ.; 6ns max	
Start-up Time	起振时间	5ms typ.; 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%	
Modulation Bandwidth (-3dB)	调制宽带	10KHz min. (Vcontrol=1.65V/2.5V)	
Aging Per Year	老化率	± 3 ppm~ ± 5 ppm/year	
Storage Temperature Range	储存温度范围	-55°C ~ +125°C	

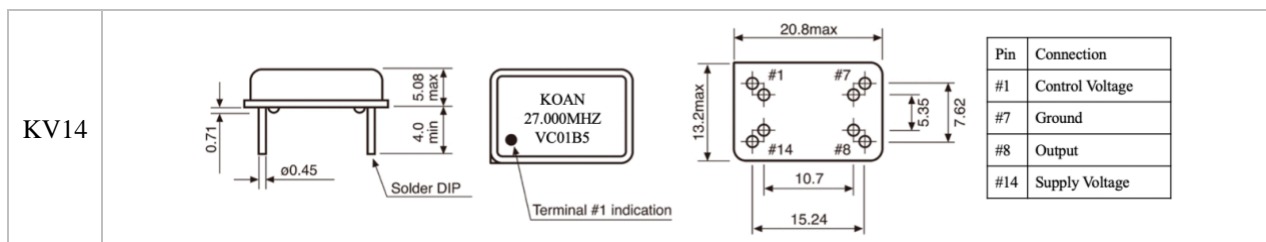
Frequency Stability 温度频差 VS Operating Temperature Range 温度范围						
Temp. Code	Temp.\ppm	± 10	± 20	± 30	± 50	± 100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
D	-55~85°C			○	○	○
E	-55~105°C				○	○
F	-55~125°C				○	○

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

KV08

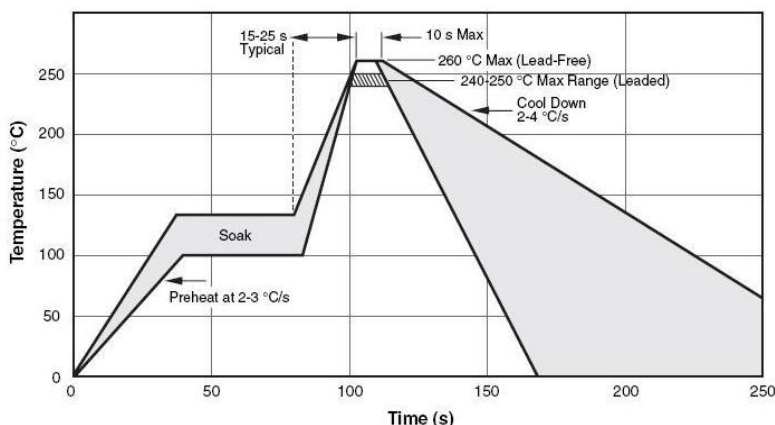
Pin	Connection
#1	Control Voltage
#4	Ground
#5	Output
#8	Supply Voltage



Part Number Guide 产品编号

<u>KV</u>	<u>14</u>	-	<u>27.000</u>	-	<u>80</u>	-	<u>33</u>	-	<u>C</u>	-	<u>30</u>	-	<u>NS</u>
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
系列	封装	输出波形	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=VCXO 压控振荡器	封装尺寸 DIP14 DIP08	“ ”=CMOS	(In MHz)	80=±80ppm 100=±100ppm 150=±150ppm 200=±200ppm	33=3.3V 50=5.0V	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					

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 typical; 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

Revision 版本

版本 Rev.	修改页 Revise Page	修改内容 Revise Contents	日期 Date	修改人 Reviser
1.0	NA	-	2021.02.25	JH