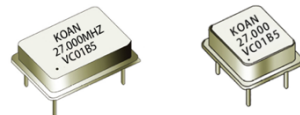


压控振荡器 Voltage Controlled Crystal Oscillator: KV08 KV14

Feature 特征

- VCXO allow for precise frequency tuning over typical range $\pm 80 \sim 200$ 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 $\pm 80 \sim \pm 200$ 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

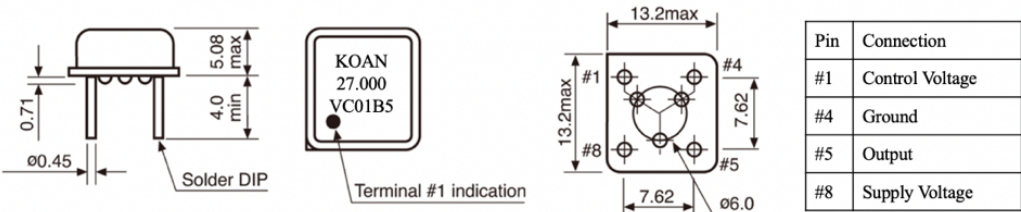
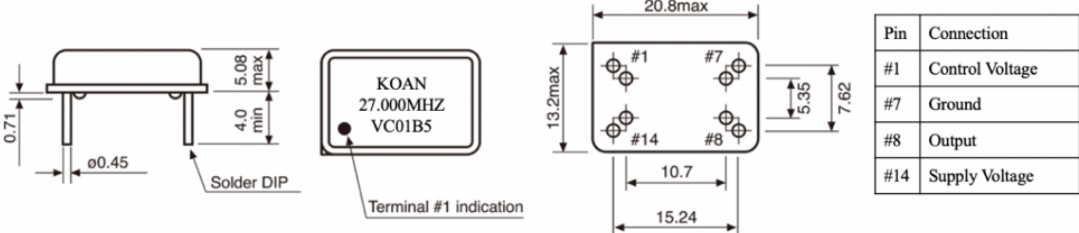
PARAMETER	性能参数	KV08 KV14	
Frequency Range	频率范围	4.000~50.000MHz	
Supply Voltage	供给电压	+3.3V ($\pm 10\%$)	+5.0V ($\pm 10\%$)
Center Control Voltage	中心控制电压	1.65Vdc (0.3V~3.0V)	2.5Vdc (0.5V~4.5V)
Output Logic	输出波形	CMOS	
Output Load	输出负载	15pF	
Frequency Tolerance	调整频差	± 20 ppm	
Current Consumption	工作电流	20mA 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	年化率	± 3 ppm~ ± 5 ppm/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	± 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

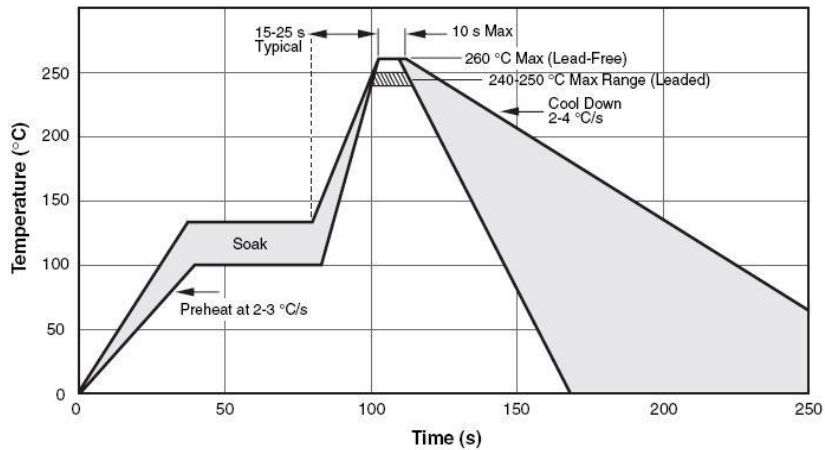
■ Outline Dimensions (Unit: mm) 外形尺寸

KV08	 <table><tr><th>Pin</th><th>Connection</th></tr><tr><td>#1</td><td>Control Voltage</td></tr><tr><td>#4</td><td>Ground</td></tr><tr><td>#5</td><td>Output</td></tr><tr><td>#8</td><td>Supply Voltage</td></tr></table>	Pin	Connection	#1	Control Voltage	#4	Ground	#5	Output	#8	Supply Voltage
Pin	Connection										
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KV14	 <table><tr><th>Pin</th><th>Connection</th></tr><tr><td>#1</td><td>Control Voltage</td></tr><tr><td>#7</td><td>Ground</td></tr><tr><td>#8</td><td>Output</td></tr><tr><td>#14</td><td>Supply Voltage</td></tr></table>	Pin	Connection	#1	Control Voltage	#7	Ground	#8	Output	#14	Supply Voltage
Pin	Connection										
#1	Control Voltage										
#7	Ground										
#8	Output										
#14	Supply Voltage										

■ 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				80=±80ppm				B: -20~+70°C		10 = ±10ppm		
‘08’: 封装尺寸		(In MHz)		100=±100ppm		33=3.3V		C: -40~+85°C		20 = ±20ppm		
DIP-08				150=±150ppm		50=5.0V		D: -55~+85°C		30 = ±30ppm		‘NS’:特殊要求
				200=±200ppm				E: -55~+105°C		50 = ±50ppm		
								F: -55~+125°C		100 = ±100ppm		

■ 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

■ 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