

Voltage Controlled Crystal Oscillator (压控振荡器) - KV14S

Feature 特征

- Frequency pulling range $\pm 80\text{ppm}$ typical 压控范围正常为 $\pm 80\text{ppm}$



RoHS
Compliant
KOAN

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

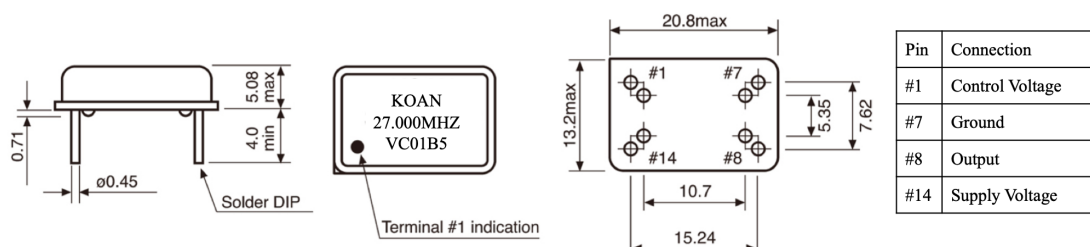
General Specifications 规格参考

PARAMETER	性能参数	KV14S	
Frequency Range	频率范围	10.0~250.0MHz	10.0~156.0MHz
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	True Sine	
Output Load	输出负载	50 Ω	
Harmonics	谐波抑制	< -30dBc (Frequency dependent)	
Frequency Tolerance	调整频差	$\pm 20\text{ppm}$	
Current Consumption	工作电流	20mA max.	40mA max
Output Level	输出级别	+3dBm min.	+5dBm min.
Frequency Pulling Range	压控范围	$\pm 80\text{ppm}$ min.	
Phase Noise (e.g. 125.0MHz)	相位噪声	-75dBc/Hz@10Hz; -128dBc/Hz@100KHz	
Input Impedance	输入电阻	> 10K Ω	
Start-up Time	起振时间	6ms typical	
Linearity	非线性误差	$\pm 10\%$ max	
Modulation Bandwidth (-3dB)	调制宽带	10KHz min.	
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	± 10	± 20	± 30	± 50	± 100
B	-20~70 $^{\circ}\text{C}$	○	○	○	○	○
C	-40~85 $^{\circ}\text{C}$		○	○	○	○
D	-20~105 $^{\circ}\text{C}$			○	○	○
E	-40~105 $^{\circ}\text{C}$				○	○
F	-55~105 $^{\circ}\text{C}$					○
G	-20~125 $^{\circ}\text{C}$					○

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

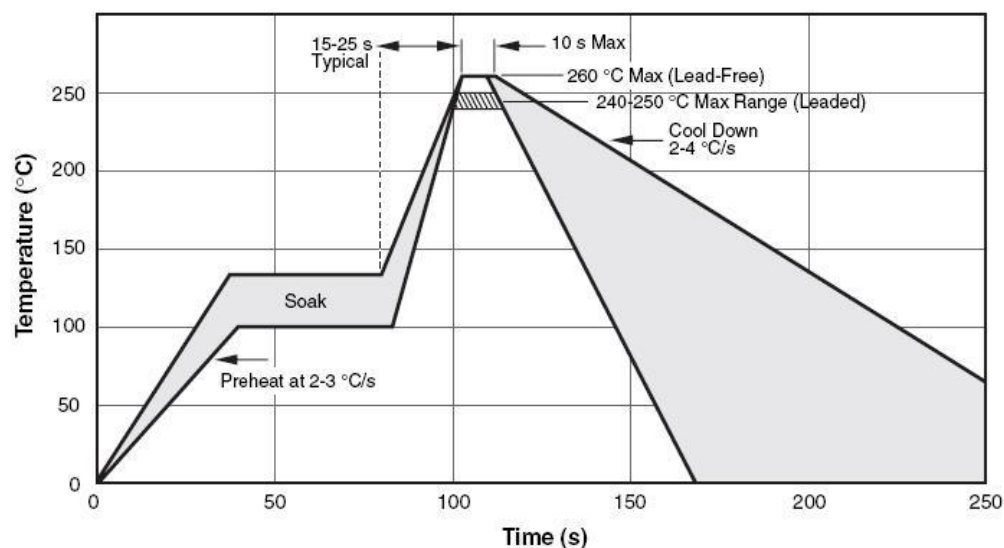
Outline Dimensions (Unit: mm) 外形尺寸



Part Number Guide 产品编号

<u>KV14S</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’: 产品系列 ‘14’: 封装尺寸 ‘S’: 输出波形 Sine Wave	-	(In MHz)	-	80 = ±80ppm	-	33=3.3V 50=5.0V	-	B: -20~+70℃ C: -40~+85℃ D: -20~+105℃ E: -40~+105℃ F: -55~+105℃ G: -20~+125℃	-	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