

## 压控振荡器 Voltage Controlled Crystal Oscillator: KV14S

### Feature 特征

- VCXO allow for precise frequency tuning over typical range  $\pm 80\text{ppm}$  min 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 $\pm 80\text{ppm}$  min.
- True sine wave output for low distortion and superior signal integrity 正弦波输出有极低失真和良好信号完整性
- Ideal for analog modulation system, RF circuits, and precision timing application 适用于模拟调制系统，射频电路，高精度定时应用



### 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( $\pm 5\%$ )	+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 $\Omega$	
Harmonics	谐波抑制	< -30dBc (Frequency dependent)	
Frequency Tolerance	调整频差	$\pm 20\text{ppm}$	
Current Consumption	工作电流	40mA max.	
Output Level	输出级别	+3dBm 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 $\Omega$	
Start-up Time	起振时间	10ms max.	
Linearity	非线性误差	$\pm 10\%$ max.	
Modulation Bandwidth (-3dB)	调制宽带	10KHz min.	
Aging Per Year	年老化率	$\pm 3\text{ppm}$ ~ $\pm 5\text{ppm}/\text{year}$	
Storage Temperature Range	储存温度范围	-55 $^{\circ}\text{C}$ ~ +125 $^{\circ}\text{C}$	

### Frequency Stability 温度频差 VS Operating Temperature Range 温度范围

Temp. Code	Temp.\ppm	$\pm 20$	$\pm 25$	$\pm 30$	$\pm 50$	$\pm 100$
B	-20~70 $^{\circ}\text{C}$	o	o	o	o	o
C	-40~85 $^{\circ}\text{C}$		o	o	o	o
E	-40~105 $^{\circ}\text{C}$				o	o
F	-55~125 $^{\circ}\text{C}$					o

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

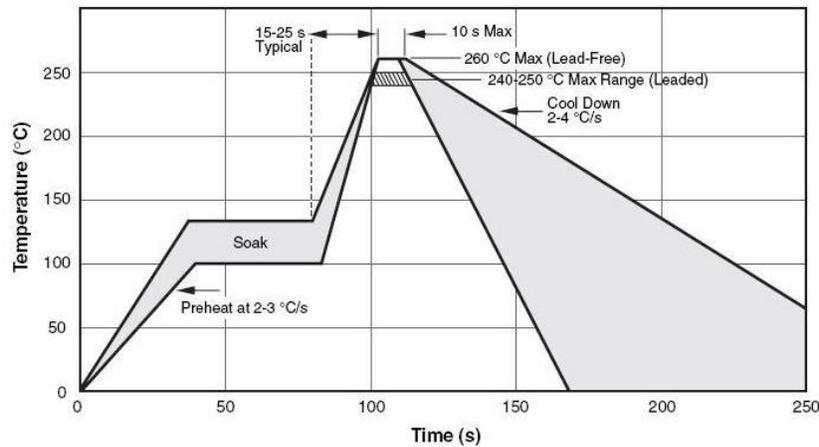
**KV14S**

Pin	Connection
#1	Control Voltage
#7	Ground
#8	Output
#14	Supply Voltage

## 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’: 压控系列 ‘14’: 封装尺寸 DIP-14 ‘S’: 输出波形 True Sine		(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