KOAN Product Information (产品介绍)

Voltage Controlled Crystal Oscillator (压控振荡器) - KV32

Feature 特征

- Frequency pulling range from ±80~±200ppm 压控范围从±80 到±200ppm

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

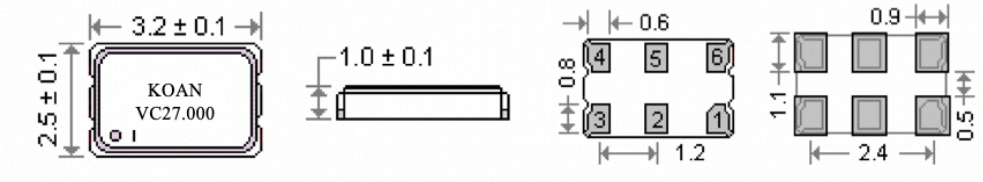
General Specifications 规格参考

PARAMETER	性能参数	KV32			
Frequency Range	频率范围	4.000~50.000MHz			
Supply Voltage	供给电压	+1.8V (±10%)	+2.5V (±10%)	+3.3V (±10%)	+5.0V(±10%)
Center Control Voltage	中心控制电压	0.9Vdc (0V~1.8V)	1.25Vdc (0.25V~2.25V)	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	±20ppm			
Current Consumption	工作电流	20mA max			
Output Logic High "1" Output Logic Low "0"	输出电平 高 输出电平 低	0.9Vdd min 0.1Vdd max			
Frequency Pulling Range	压控范围	±80~±200ppm			
Integrated Phase Jitter	抖动	1ps max (12KHz~20MHz)			
Input Impedance	输入电阻	1MΩ typical			
Rise & Fall Time	上升下降时间	10ns max			
Start-up Time	起振时间	5ms typical, 10ms max			
Linearity	非线性误差	±6% typical, ±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	年老化率	±3ppm~±5ppm/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	-20~105°C			○	○	○
E	-40~105°C				○	○
F	-55~105°C					○
G	-20~125°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



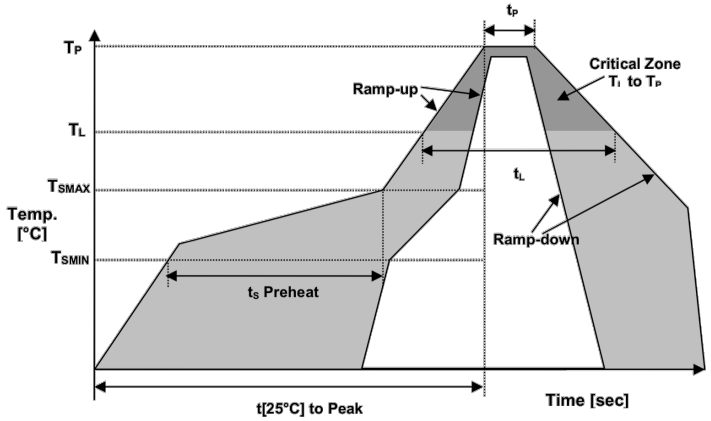
Pin	Connection
#1	Vcontrol
#2	Tri-State
#3	GND
#4	Output
#5	N.C.
#6	V_{DD}

Product Information (产品介绍)

Part Number Guide 产品编号

KV32	-	27.000	-	100	-	33	-	C	-	30	-	NS
↓		↓		↓		↓		↓		↓		↓
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 **'32':** 封装尺寸 SMD 3.2x2.5mm		(In MHz)		80=±80ppm 100=±100ppm 150=±150ppm 200=±200ppm		18=1.8V 25=2.5V 33=3.3V 50=5.0V		B: -20~+70°C C: -40~+85°C D: -20~+105°C E: -40~+105°C F: -55~+105°C G: -20~+125°C		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm 50 = ±50ppm 100 = ±100ppm		'**NS**': 特殊要求

Reflow Profile 回流焊



Temperature Min Preheat	最低预热温度	T_{smin}	150°C
Temperature Max preheat	最高预热温度	T_{smax}	200°C
Time (T_{smin} to T_{smax})	时间差	T_s	60~120 sec
Temperature	温度	T_L	217°C
Peak Temperature	最高温	T_p	260 °C
Ramp-up Rate	升温速度	R_{up}	3°C/sec max
Ramp-down Rate	降温速度	R_{down}	6°C/sec max
Time within 5°C of Peak Temperature	最高温度停留时间	t_p	30 sec
Time t[25°C] to peak temperature	25度到最高温度时间	t[25°C] to peak	480 sec
Time	时间	t_L	60~150 sec