

Oven Controlled Crystal Oscillator (恒温振荡器) - KO2020T

Feature 特征

- High Stability SC-cut or IT-cut Crystal 高稳定性(SC/IT 切晶片)
- Voltage Control is standard 有电压控制

Applications 应用

- Mobile base station defense (mobile target display radar), navigation, frequency counters, spectrum and network analysis instruments (frequency standards) 移动通信基站国防(移动目标显示雷达),导航, 频率计数器, 频谱和网络分析仪器(频率标准)



RoHS
Compliant
KOAN

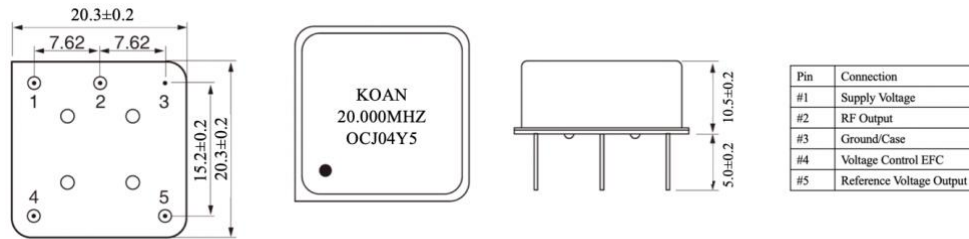
General Specifications 规格参考

PARAMETER	性能参数	KO2020T	
Frequency Range	频率范围	5.0~40.0MHz	
Supply Voltage	工作电压	+3.3V±5%	+5.0V±5%
Control Voltage Center	中心控制电压	+1.65V	+2.5V
Initial Calibration Tolerance	调整频差	±0.5ppm max	
Output Logic	输出波形	HCMOS	
Output Load	输出负载	15pF	
Frequency Stability 频率温度稳定度 VS			
Temperature	温度	见下表	
Voltage Change	电压变化	±0.5ppb max (supply voltage ±5% variation)	
Warm-up Time	预热时间	3 minutes max	
Aging	老化率	±0.3ppm max. over 10 years	
Load Change	负载变化	±20ppb max	
Frequency Deviation Range	电压调整	±0.5~±2.0ppm	
Input Impedance	输入电阻	100KΩ min.	
EFC Linearity	非线性误差	±10% max.	
Power Dissipation	功耗	1.3W max at steady-state; 800mA max at turn-on	
Output Logic High	输出电平 高	+2.4V min	+3.5V min
Output Logic Low	输出电平 低	+0.5V max	+0.5V max
Phase noise	相位噪声	-115dBc @ 10Hz	
Duty Cycle	占空比	45~55%	
Rise & Fall Time	上升下降时间	7 ns max.	
Storage Temperature Range	储存温度范围	-55°C~+125°C	
Shock	冲击	2000 G's, 0.3ms 1/2sine	
Vibration	振动	10 to 2000 Hz/10G's	

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围			
Temp. Code	Temp.\ppb	±5ppb (C5)	±10ppb (B1)
A	-10~60°C	○	○
B	-20~70°C		○
C	-40~85°C		○

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

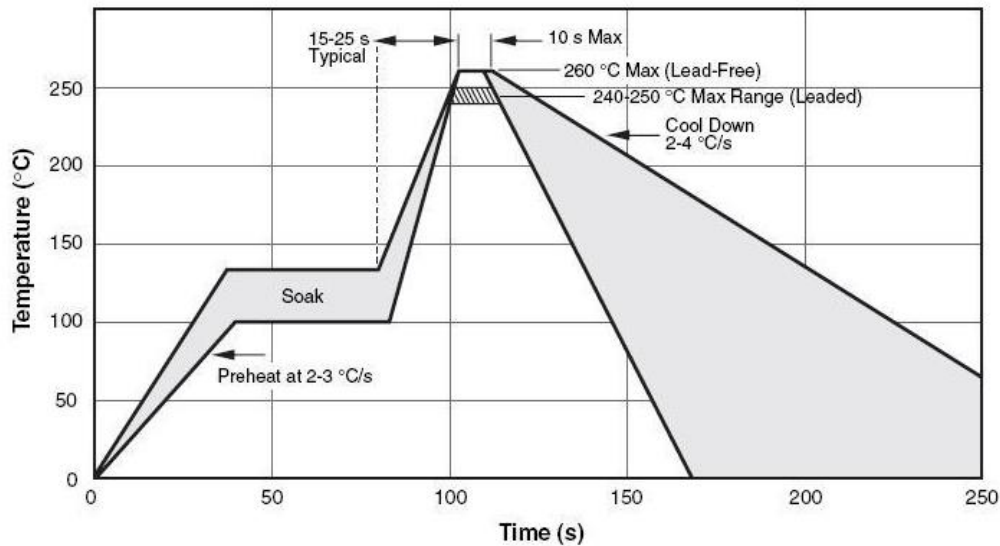
Outline Dimensions (Unit: mm) 外形尺寸



Part Number Guide 产品编号

KO2020T	-	20.000	-	50	-	A	-	C5	-	NS
↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求
'KO':产品系列 '2020':封装尺寸 20.3x20.3mm 'T':输出波形 HCMOS		(In MHz)		33=3.3V 50=5.0V		A: -10~+60°C B: -20~+70°C C: -40~+85°C		C5 = ±5ppb B1 = ±10ppb		'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