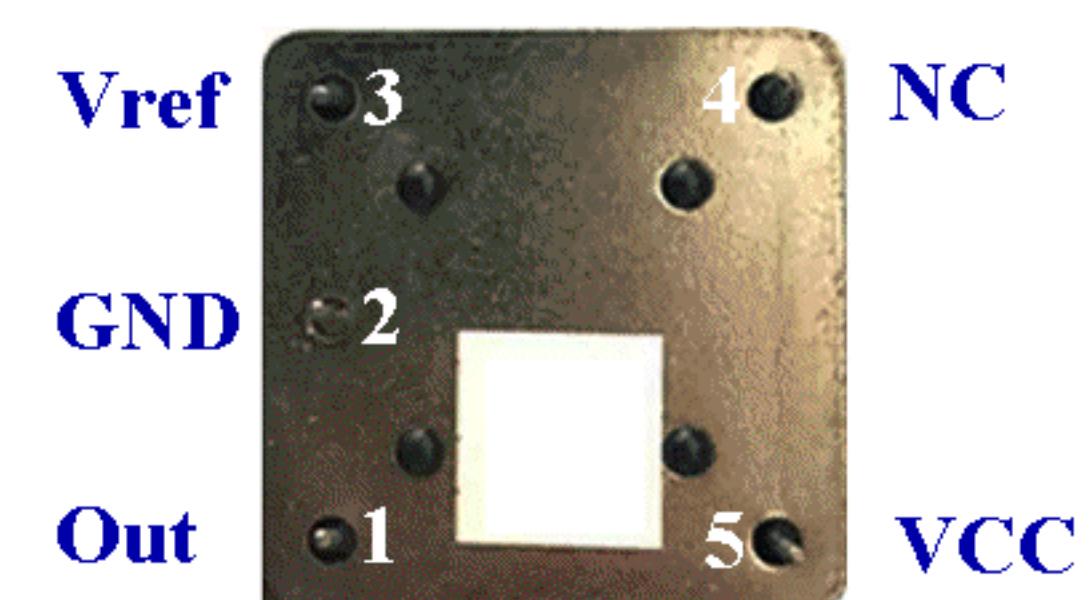




# OSC5A2B02

Oven-controlled crystal oscillator (OCXO)

**Bottom view**



	规格 Specification	参数值 Parameter value	测试条件 Testing conditions
1	标称频率 Nominal frequency	10.00MHz	
2	初始频率准确度 Initial freq. accuracy	$\leq \pm 200\text{ppb}$	$V_c = +2.0\text{V}$ , @ $+25^\circ\text{C}$ , 上电工作15分钟后 <b>15 min after power on</b>
3	电源稳定性 Power supply stability	$\leq \pm 2\text{PPB}$	$V_s \pm 5\%$
4	负载稳定性 Load stability	$\leq \pm 2\text{PPB}$	Load $\pm 5\%$
5	老化 Aging	$\leq \pm 0.5\text{PPB/day}$ $\leq \pm 100\text{PPB/first year}$ $\leq \pm 0.4\text{PPM/10 years}$	上电工作30天后@ $25^\circ\text{C}$ <b>30 days after power on @ 25°</b>
6	温度稳定性 Temperature stability	$\leq \pm 10\text{PPB}$	$-0^\circ\text{C} \sim +75^\circ\text{C}$ , ref to $+25^\circ\text{C}$
7	短期稳定性 Short term stability	$\leq 0.05\text{ppb/s}$	上电1小时后 <b>1 hour after power on</b>
8	开机时间 Turn on time	$\leq 5\text{mins}$	$\leq 100\text{ppb}$ /上电5分钟/ $V_c = $ 中心电压/ $25^\circ\text{C}$ 相对1小时频， $V_c = +2.0\text{V}$ , @ $+25^\circ\text{C}$
<b>电源电压/电流 Supply voltage / current</b>			
9	电源电压 Supply voltage	$+5.0\text{V} \pm 5\%$	
10	工作电流 Working current	$\leq 600\text{mA}$ 初始 $\leq 250\text{mA}$ 稳定状态	<b>Initial</b> <b>Steady state</b>
<b>输出特性 Output characteristics</b>			
11	输出波形 Output waveform	HCMOS	
12	输出负载 Output load	$15\text{pF}$	
13	输出电平 Output level	$V_{OH} \geq 4.5\text{V}$ $V_{OL} \leq 0.5\text{V}$	
14	上升/下降时间 Rise / fall time	$\leq 6\text{nS}$	
15	占空比 Duty cycle	45/55 %	
16	杂波抑制 Clutter suppression	\	
<b>压控特性 Voltage control characteristics</b>			
17	压控范围 Voltage control range	$2.0 \pm 2.0\text{V}$	
18	调频范围 Tuning range	$-2.0 \sim -1.0\text{ppm}$ $-0.2 \sim +0.2\text{ppm}$ $+1.0 \sim +2.0\text{ppm}$	$V_c = 0\text{V}$ $V_c = 2.0\text{V}$ $V_c = 4.0\text{V}$
19	压控斜率 Voltage control slope	正斜率 Positive slope	
20	压控线性 Voltage controlled linearity	$< \pm 10\%$	
21	输入阻抗 Input impedance	$\geq 100\text{k}\Omega$	
22	调制带宽 Modulation bandwidth	$> 10\text{KHz}$	
<b>相位噪声 Phase noise</b>			
23	相位噪声 Phase noise	$-80\text{dBc/Hz}$ @ $1\text{Hz}$ $-120\text{dBc/Hz}$ @ $10\text{Hz}$ $-140\text{dBc/Hz}$ @ $100\text{Hz}$ $-145\text{dBc/Hz}$ @ $1\text{KHz}$ $-150\text{dBc/Hz}$ @ $10\text{KHz}$	
<b>温度范围 Temperature range</b>			
24	工作温度范围 Working	$-0^\circ\text{C} \sim +75^\circ\text{C}$	
25	可工作温度范围 Operating	$-40^\circ\text{C} \sim +85^\circ\text{C}$	
26	存储温度范围 Storage	$-55^\circ\text{C} \sim +105^\circ\text{C}$	
<b>封装尺寸 Package size</b>			
27	封装(mm)	$25.4 \times 25.4 \times 12.5$	
28	引脚镀层 Pin plating	镍镀+浸锡 Nickel plating + Immersion tin	
29	ROHS	ROHS网络豁免 ROHS Network exemption	