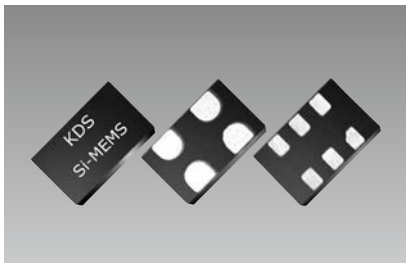
扩频MEMS振荡器(SSCG)

MO9002/MO9003/MO9005



■ 优点

- 调制宽度
  中心扩散: ±0.5%、±0.25%
  向下扩散: −1%、−0.5%
- Standby、output enable or spread disable mode
- Cycle-to-Cycle抖动: <30 ps

■ 用途

- 打印机
- 平板显示器驱动
- PCI
- 微处理器

无铅

RoHS对应

型号	频率范围 (MHz)	频率公差 (×10⁻⁶)	电源电压 (V)	消耗电流 (mA Typ.)	尺寸 (mm)	输出
MO9002	1 to 220	±25, ±50	+1.71 to +1.89, +2.25 to +3.63	+48 to +75	5.0×3.2×0.8, 7.0×5.0×1.0 (QFN)	LVPECL, CML LVDS, HCSL
MO9003	1 to 110	±50, ±100		+3.2 to +4.1 (+0.4 to +4.3 μA stby)	2.5×2.0×0.8, 3.2×2.5×0.8, 5.0×3.2×0.8, 7.0×5.0×1.0 (QFN)	LVCMOS
MO9005	1 to 141	±20, ±25, ±50	+1.62 to +1.98, +2.25 to +3.63	5.0 to 6.5 (0.4 to 4.3 μA stby)	2.0×1.6×0.8, 2.5×2.0×0.8, 3.2×2.5×0.8 (QFN)	

■ 一般规格(MO9005)

项目	符号	Min.	Typ.	Max.	单位	条件
输出频率范围	f	1	–	141	MHz	
电源电压	Vdd	+1.62	+1.8	+1.98	V	
		+2.25	+2.5	+2.75		
		+2.52	+2.8	+3.08		
		+2.7	+3.0	+3.3		
		+2.97	+3.3	+3.63		
		+2.25	–	+3.63		
运行温度范围	T_use	−20	–	+70	℃	Extended Commercial
		−40	–	+85		Industrial
频率公差	F_tol	−20	–	+20	×10⁻⁶	包含 +25℃时的初始频率偏差，长年老化（1 年、+25℃），温度特性，运行电源电压范围内的电源电压特性。
		−25	–	+25		
		−50	–	+50		
消耗电流	Idd	–	+5.6	+6.5	mA	No load condition, f = 40 MHz, Vdd = +2.5V to +3.3V
		–	+5.0	+5.5		No load condition, f = 40 MHz, Vdd = +1.8V
待机时电流	I_std	–	+2.1	+4.3	μA	$\overline{ST}$ = GND, Vdd = +2.5V to +3.3V, Output is weakly pulled down
		–	+0.4	+1.5		$\overline{ST}$ = GND, Vdd = +1.8V, Output is weakly pulled down
调制宽度	–	±0.125 to ±2.060			%	中心扩散
		−4.28 to −0.25				向下扩散
占空比	DC	45	–	55	%	
0 电平电压	V_{OL}	90%	–	–	Vdd	I_{OH} = - 4 mA (Vdd = +3.0V or +3.3V) I_{OH} = - 3 mA (Vdd = +2.8V and Vdd = +2.5V) I_{OH} = - 2 mA (Vdd = +1.8V)
1 电平电压	V_{OH}	–	–	10%	Vdd	I_{OL} = +4 mA (Vdd = +3.0V or +3.3V) I_{OL} = +3 mA (Vdd = +2.8V and Vdd = +2.5V) I_{OL} = +2 mA (Vdd = +1.8V)
上升时间、下降时间	Tr, Tf	–	1	2	ns	Vdd = +2.5V, +2.8V, +3.0V or +3.3V, 20% to 80%, default derive strength
		–	1.3	2.5		Vdd =+1.8V, 20% to 80%, default derive strength
		–	–	2.0		Vdd = +2.25V to +3.63V, 20% to 80%, default derive strength
OE 端子 0 电平输入电压	V_{IL}	–	–	Vdd×0.3	V	Pin 1, OE or $\overline{ST}$
OE 端子 1 电平输入电压	V_{IH}	Vdd×0.7	–	–	V	Pin 1, OE or $\overline{ST}$
OE 端子禁用电流	I_oe	–	+5.0	+6.5	mA	f = 40 MHz, Vdd = +2.5V to +3.3V, OE = GND, Output in high-Z state
		–	+4.6	+5.2		f = 40 MHz, Vdd = +1.8V, OE = GND, Output in high-Z state
输出使能时间 输出禁用时间	T_oe	–	–	180	ns	f = 40 MHz - For other frequencies, T_oe = 100ns + 3 period
包装单位	1000pcs./reel(φ180)					