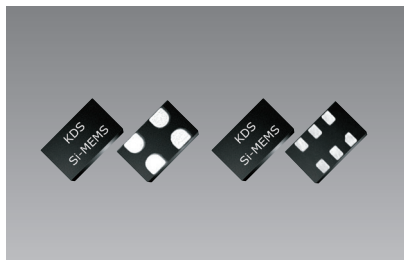


MEMS振荡器 - Low Jitter

MO9120/MO9121/MO9122/MO8208/MO8209



■ 优点

- 频率公差: $\pm 10 \times 10^{-6}$
- 低相位抖动

■ 用途

- PC、网络设备、存储器
- 通讯设备、工业控制设备
- SATA、SAS、Ethernet、PCI Express、视频、WiFi



型号	频率范围 (MHz)	频率公差 ($\times 10^{-6}$)	电源电压 (V)	消耗电流 (mA Typ.)	尺寸 (mm)	输出
MO9120	25 to 212.5	$\pm 10, \pm 20, \pm 25, \pm 50$	+2.25 to +3.63	+54 to +69	3.2×2.5×0.8, 5.0×3.2×0.8, 7.0×5.0×1.0 (QFN)	LVPECL LVDS
MO9121	1 to 220					
MO9122	220 to 625					
MO8208	1 to 80			+29 to +36 (+10 μ A stby)	2.7×2.4×0.8, 3.2×2.5×0.8, 5.0×3.2×0.8, 7.0×5.0×1.0 (QFN)	LVCMOS
MO8209	80 to 220					

■ 一般规格(MO9121)

项目	符号	Min.	Typ.	Max.	单位	条件
输出频率范围	f	1	-	220	MHz	Refer to datasheet for exact list of supported frequencies
电源电压	V _{dd}	+2.97	+3.3	+3.63	V	
		+2.25	+2.5	+2.75		
		+2.25	-	+3.63		
运行温度范围	T _{use}	-20	-	+70	°C	Extended Commercial
		-40	-	+85		Industrial
频率公差	F _{stab}	-10	-	+10	$\times 10^{-6}$	包含初始频率偏差、温度特性、运行电源电压范围内的电源电压特性、负载特性。
		-20	-	+20		
		-25	-	+25		
		-50	-	+50		
长期老化 (1 年)	F _{aging1}	-2.0	-	+2.0	$\times 10^{-6}$	T _A = +25°C
长期老化 (10 年)	F _{aging10}	-5.0	-	+5.0	$\times 10^{-6}$	T _A = +25°C
占空比	DC	45	-	55	%	
OE 端子 0 电平输入电压	V _{IL}	-	-	V _{dd} ×0.3	V	Pin 1, OE or ST
OE 端子 1 电平输入电压	V _{IH}	V _{dd} ×0.7	-	-	V	Pin 1, OE or ST
启动时间	T _{start}	-	6.0	10	ms	V _{dd} 达到额定最小值以后经过的时间
重启时间	T _{resume}	-	6.0	10	ms	待机模式、ST 端子达到界限值 50% 以后经过的时间
LVPECL 输出、DC and AC Characteristics						
消耗电流	I _{dd}	-	+61	+69	mA	Excluding Load Termination Current, V _{dd} = +3.3V or +2.5V
OE 端子禁用电流	I _{oe}	-	-	+35	mA	OE = Low
待机时电流	I _{std}	-	-	+100	μ A	ST = Low, for all V _{dds}
0 电平电压	V _{OL}	V _{dd} - 1.9	-	V _{dd} - 1.5	V	
1 电平电压	V _{OH}	V _{dd} - 1.1	-	V _{dd} - 0.7	V	
上升时间、下降时间	Tr, Tf	-	300	700	ps	20% to 80%
输出使能时间	T _{oe}	-	-	115	ns	f = 212.5 MHz - For other frequencies, T _{oe} = 100ns + 3 period
输出禁用时间	T _{oe}	-	-	115	ns	f = 212.5 MHz - For other frequencies, T _{oe} = 100ns + 3 period
RMS 周期抖动	T _{jitt}	-	1.2	1.7	ps	f = 100 MHz, V _{dd} = +3.3V or +2.5V
		-	1.2	1.7		f = 156.25 MHz, V _{dd} = +3.3V or +2.5V
		-	1.2	1.7		f = 212.5 MHz, V _{dd} = +3.3V or +2.5V
RMS 相位抖动 (随机)	T _{phj}	-	0.6	0.85	ps	f = 156.25 MHz, Integration bandwidth = 12 kHz to 20 MHz, all V _{dds}
LVDS 输出、DC and AC Characteristics						
消耗电流	I _{dd}	-	+47	+55	mA	Excluding Load Termination Current, V _{dd} = +3.3V or +2.5V
OE 端子禁用电流	I _{oe}	-	-	+35	mA	OE = Low
待机时电流	I _{std}	-	-	+100	μ A	ST = Low, for all V _{dds}
上升时间、下降时间	Tr, Tf	-	495	700	ps	20% to 80%
差分输出电压	V _{OD}	+250	+350	+450	mV	
差分输出误差	ΔV_{OD}	-	-	+50	mV	
补偿电压	V _{OS}	+1.125	+1.2	+1.375	V	
补偿误差	ΔV_{OS}	-	-	+50	mV	
输出使能时间	T _{oe}	-	-	115	ns	f = 212.5 MHz - For other frequencies, T _{oe} = 100ns + 3 period
输出禁用时间	T _{oe}	-	-	115	ns	f = 212.5 MHz - For other frequencies, T _{oe} = 100ns + 3 period
RMS 周期抖动	T _{jitt}	-	1.2	1.7	ps	f = 100 MHz, V _{dd} = +3.3V or +2.5V
		-	1.2	1.7		f = 156.25 MHz, V _{dd} = +3.3V or +2.5V
		-	1.2	1.7		f = 212.5 MHz, V _{dd} = +3.3V or +2.5V
RMS 相位抖动 (随机)	T _{phj}	-	0.6	0.85	ps	f = 156.25 MHz, Integration bandwidth = 12 kHz to 20 MHz, all V _{dds}
包装单位	1000pcs./reel (ϕ 180) or 3000pcs./reel (ϕ 180: 3225 package)					