



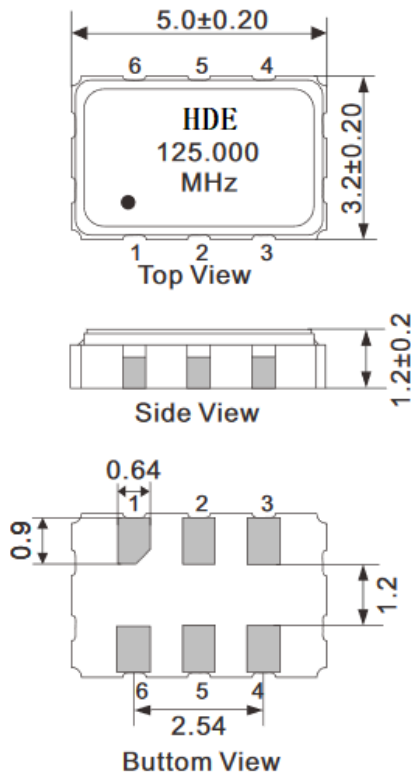
压控晶体振荡器 (VCXO)

■ 技术指标:

指标名称 PARAMETER		值和单位 Value and Unit	条 件 conditions
标 称 频 率 Nominal Frequency		50.000 - 200.00MHz	25℃
频率稳定度 Frequency stability	温度稳定度 VS Temperature	$\leq \pm 25\text{ppm}$	-20℃~+70℃
		$\leq \pm 50\text{ppm}$	-40℃~+85℃
	老化率 Aging	$\leq \pm 3.0\text{ppm}$	First year
	频率准确度 Calibration frequency	$\leq \pm 25\text{ppm}$	VC=VDD/2
电调 Frequency control	压控电压: Voltage Controlled	1.65V±1.65V	VDD=3.3V
	压控频率 Pullability	$\pm 50\text{ppm min}$	1.65V±1.65V
	线性度 Linearity	10% max	
	调节斜率 Slope	正 Positive	
输出 Out signal	电平	LVPECL	
	幅度 level	低电平 (max): VDD-1.62V 高电平 (min): VDD-1.025V	
	负载 load	50Ω	VDD-2V
	占空比 Duty cycle	45%~55%	
	上升沿/下降沿 Rise/Fall time	1ns/1ns	20%~80%
	开始时间 Start-up Time	10ms	
	抖动 Phase Jitter	1pS max.	12kHz-20MHz
电源 Power	供电电压 Power Supply	$+3.3 \times (1 \pm 5\%) \text{ V}$	
	工作电流 Current consumption	$\leq 80\text{mA}$	$+3.3 \times (1 \pm 5\%) \text{ V}$
温度范围 Temperature Range	工作温度 Operating temperature	-40℃~+85℃	
	储藏温度 Storage temperature	-55~125℃	
Package	外形尺寸 (max) Outside measurement	5.0×3.2×1.2	mm

Package:

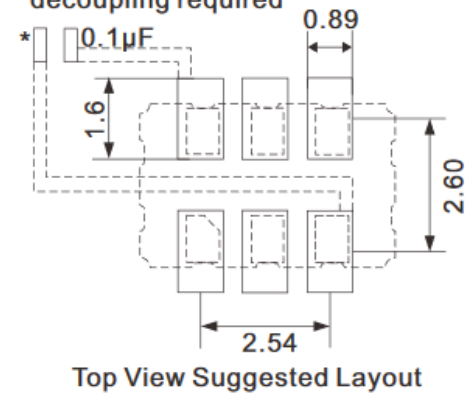
Units: mm



Pin Connections

Pin No.	Connection
1	Vcon
2	OE or NC
3	GND
4	Output
5	Comp. Output
6	Vcc

* External high frequency power supply decoupling required



Waveform Diagrams

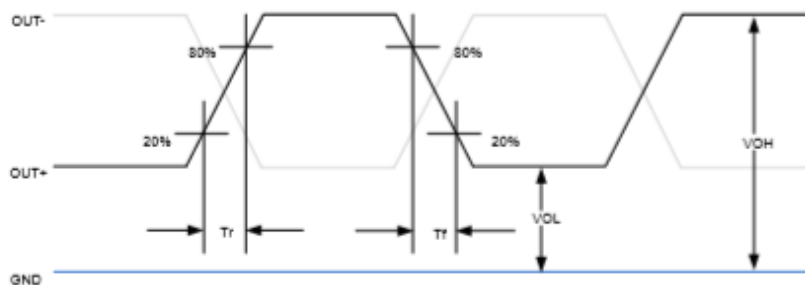


Figure 1(a). LVPECL Voltage Levels per Differential Pin (OUT+/OUT-)

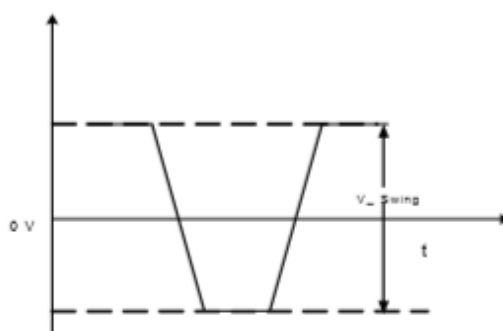


Figure 1(b). LVPECL Voltage Levels Across Differential Pair

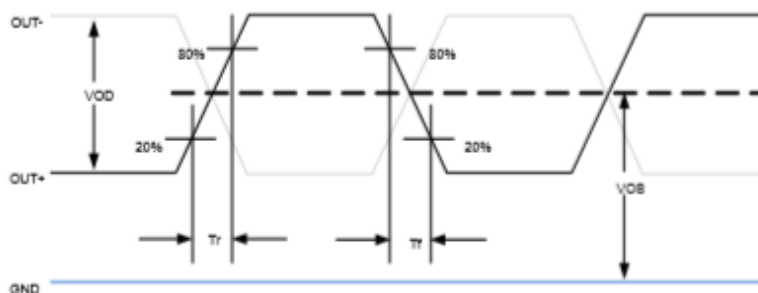


Figure 2. LVDS Voltage Levels per Differential Pin (OUT+/OUT-)

Termination Diagrams

LVPECL:

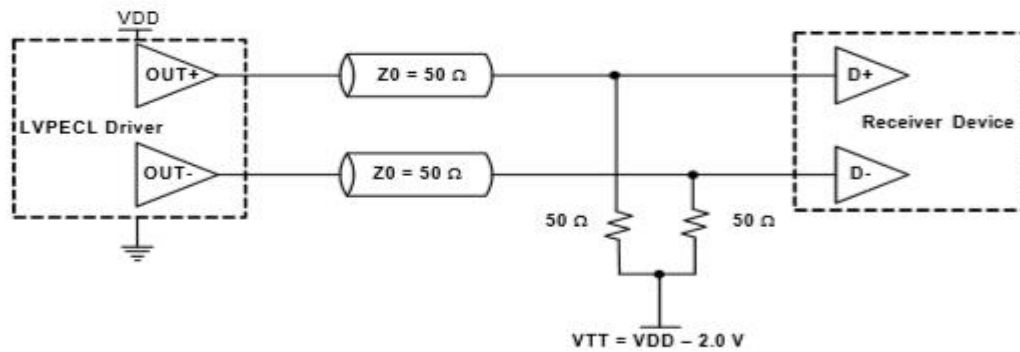


Figure 3. LVPECL Typical Termination

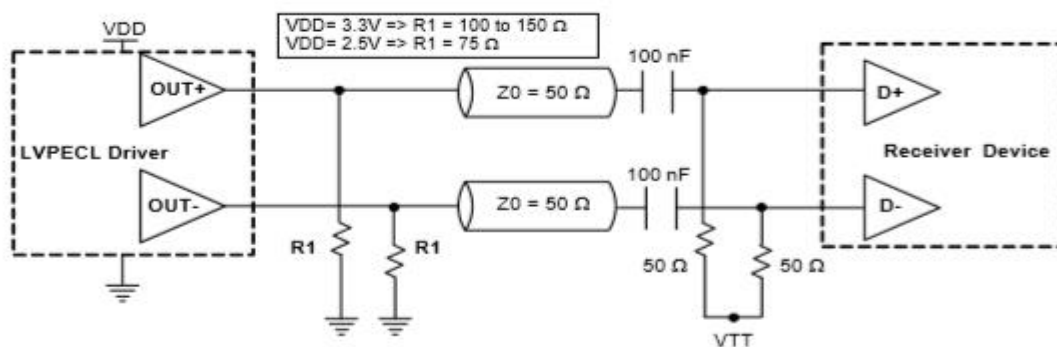


Figure 4. LVPECL AC Coupled Termination

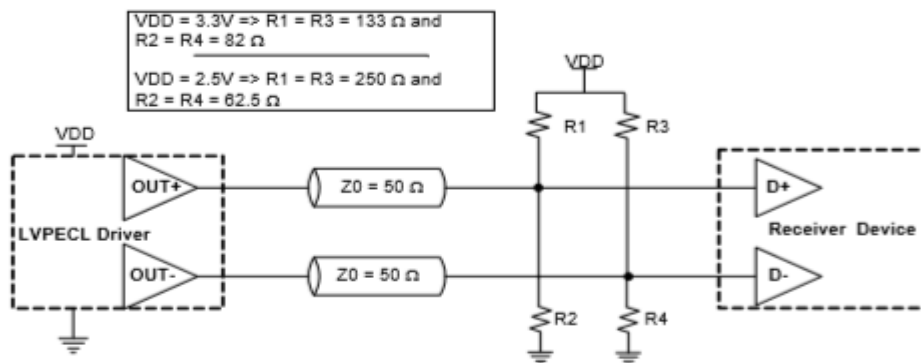


Figure 5. LVPECL with Thevenin Typical Termination

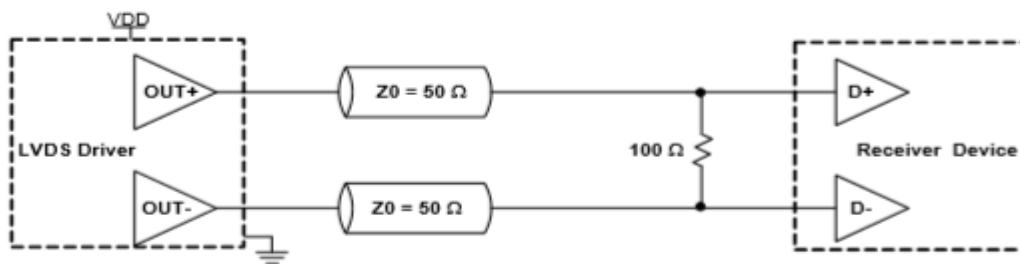


Figure 6. LVDS Single Termination (Load Terminated)