

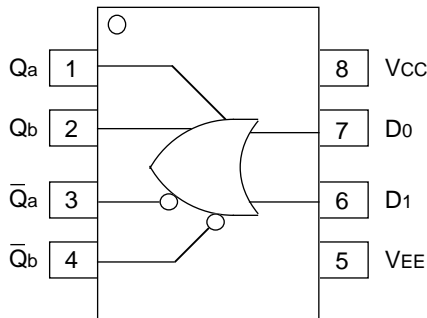
**FEATURES**

- 290ps propagation delay
- Dual outputs for 25Ω drive applications
- Internal 75KΩ input pull-down resistors
- Available in 8-pin SOIC package

**DESCRIPTION**

The SY10/100EL12 are low-impedance drive buffers. With two pairs of OR/NOR outputs, the devices are ideally suited for high drive applications such as memory addressing. These devices are functionally equivalent to the E112 devices, with higher performance capabilities. With propagation delays significantly faster than the E112, the EL12 is ideally suited for those applications which require the ultimate in AC performance.

**PIN CONFIGURATION/BLOCK DIAGRAM**



**SOIC  
TOP VIEW**

**PIN NAMES**

Pin	Function
D0, D1	Data Inputs
Qa, Qb	Data Outputs

**DC ELECTRICAL CHARACTERISTICS**

VEE = VEE (Min.) to VEE (Max.); VCC = GND

Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
IEE	Power Supply Current													mA
	10EL	—	14	17	11	14	17	11	14	17	11	14	17	
	100EL	—	14	17	11	14	17	11	14	17	13	16	20	
VEE	Power Supply Voltage													V
	10EL	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	-4.75	-5.2	-5.5	
	100EL	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	-4.20	-4.5	-5.5	
I <sub>IH</sub>	Input HIGH Current	—	—	150	—	—	150	—	—	150	—	—	150	μA

**AC ELECTRICAL CHARACTERISTICS**

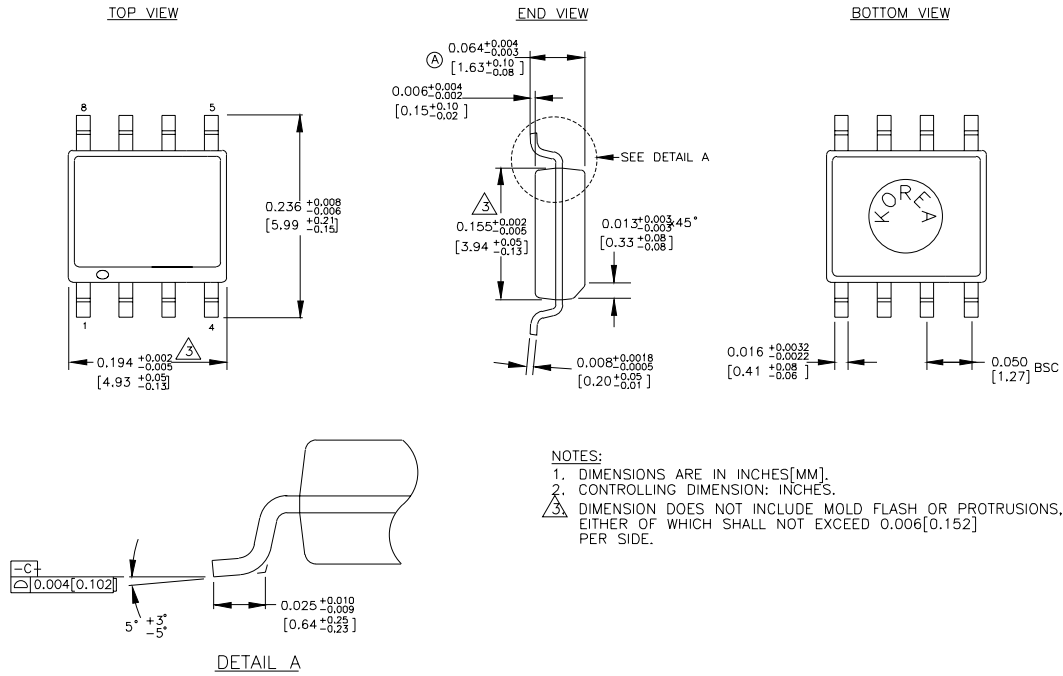
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		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
t <sub>PLH</sub> t <sub>PHL</sub>	Propagation Delay to Output D	120	280	500	170	280	450	180	290	450	210	320	480	ps
t <sub>r</sub> t <sub>f</sub>	Output Rise/Fall Times Q (20% to 80%)	150	350	550	150	350	550	150	350	550	150	350	550	ps

**PRODUCT ORDERING CODE**

Ordering Code	Package Type	Operating Range
SY10EL12ZC	Z8-1	Commercial
SY10EL12ZCTR	Z8-1	Commercial
SY100EL12ZC	Z8-1	Commercial
SY100EL12ZCTR	Z8-1	Commercial

**8 LEAD SOIC .150" WIDE (Z8-1)**



Rev. 03

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**MICREL-SYNERGY 3250 SCOTT BOULEVARD SANTA CLARA CA 95054 USA**

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