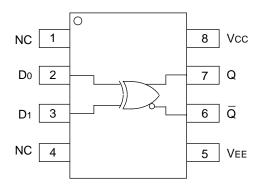
### **FEATURES**

- 260ps propagation delay
- High bandwidth output transitions
- Internal 75K $\Omega$  input pull-down resistors
- Available in 8-pin SOIC package

#### **DESCRIPTION**

The SY10/100EL07 are 2-input XOR/XNOR gates. These devices are functionally equivalent to the E107 devices, with higher performance capabilities. With propagation delays and output transition times significantly faster than the E107, the EL07 is ideally suited for those applications which require the ultimate in AC performance.

## PIN CONFIGURATION/BLOCK DIAGRAM



SOIC TOP VIEW

### **PIN NAMES**

Pin	Function
Do, D1	Data Inputs
Q	Data Outputs

# DC ELECTRICAL CHARACTERISTICS

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

		TA = -40°C		1	TA = 0°C TA		A = +25°C		TA = +85°C					
Symbol	Parameter	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
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	<b>−</b> 5.5	-4.20	-4.5	-5.5	
lін	Input HIGH Current													μΑ
	D <sub>0</sub>	_	_	250	—	_	250	—	_	250	l —	_	250	
	D1	_	_	150	—	_	150	—	_	150	—	_	150	

## **AC ELECTRICAL CHARACTERISTICS**

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

		TA = -40°C		TA = 0°C			TA = +25°C			TA = +85°C				
Symbol	Parameter	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
tPLH tPHL	Propagation Delay to Output D	90	250	435	140	250	385	150	260	395	170	280	415	ps
tr tf	Output Rise/Fall Times Q (20% to 80%)	100	225	350	100	225	350	100	225	350	100	225	350	ps

# PRODUCT ORDERING CODE

Ordering Code	Package Type	Operating Range	Marking Code
SY10EL07ZC	Z8-1	Commercial	HEL07
SY10EL07ZCTR*	Z8-1	Commercial	HEL07
SY100EL07ZC	Z8-1	Commercial	XEL07
SY100EL07ZCTR*	Z8-1	Commercial	XEL07

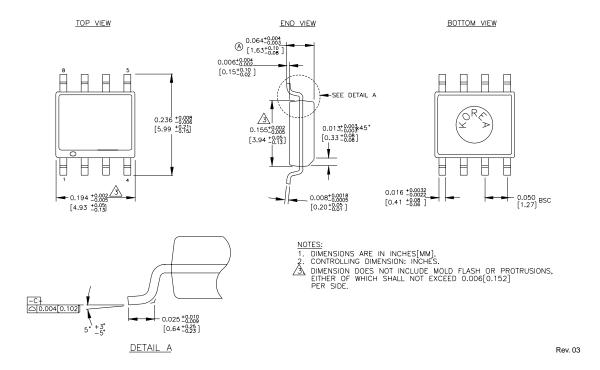
Ordering Code	Package Type	Operating Range	Marking Code
SY10EL07ZI <sup>(1)</sup>	Z8-1	Industrial	HEL07
SY10EL07ZITR*(1)	Z8-1	Industrial	HEL07
SY100EL07ZI <sup>(1)</sup>	Z8-1	Industrial	XEL07
SY100EL07ZITR*(1)	Z8-1	Industrial	XEL07

Note 1. Recommended for new designs.

<sup>\*</sup>Tape and Reel

<sup>\*</sup>Tape and Reel

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



SY10EL07 SY100EL07

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