



**2-INPUT
XOR/XNOR**

**SY10EL07
SY100EL07**

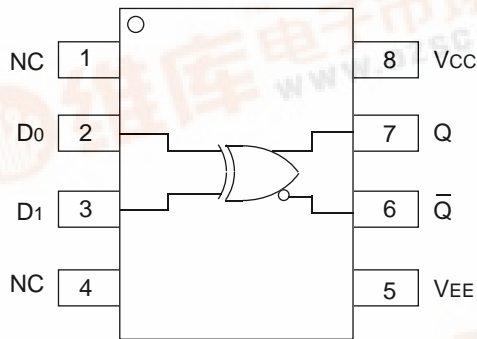
FEATURES

- 260ps propagation delay
- High bandwidth output transitions
- Internal 75KΩ 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
D0, D1	Data Inputs
Q	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	
IIH	Input HIGH Current													μA
	D0	—	—	250	—	—	250	—	—	250	—	—	250	
	D1	—	—	150	—	—	150	—	—	150	—	—	150	

AC ELECTRICAL CHARACTERISTICS

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

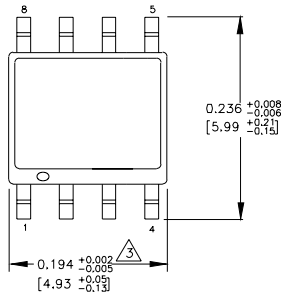
Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
tPLH tPHL	Propagation Delay to Output D	90	250	435	140	250	385	150	260	395	170	280	415	ps
tr tf	Output Rise/Fall Times Q (20% to 80%)	100	225	350	100	225	350	100	225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

PRODUCT ORDERING CODE

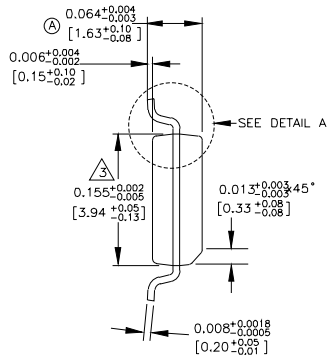
Ordering Code	Package Type	Operating Range
SY10EL07ZC	Z8-1	Commercial
SY10EL07ZCTR	Z8-1	Commercial
SY100EL07ZC	Z8-1	Commercial
SY100EL07ZCTR	Z8-1	Commercial

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

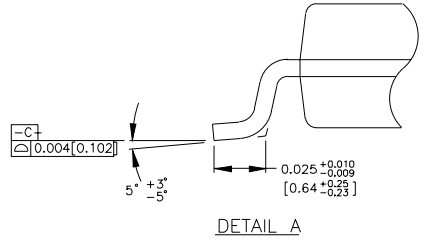
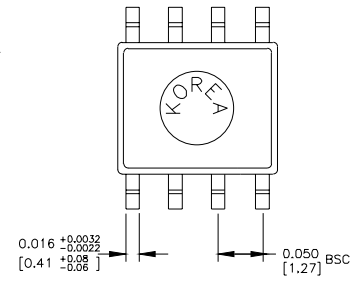
TOP VIEW



END VIEW



BOTTOM VIEW



NOTES:
 1. DIMENSIONS ARE IN INCHES[MM].
 2. CONTROLLING DIMENSION: INCHES.
 3. DIMENSION DOES NOT INCLUDE MOLD FLASH OR PROTRUSIONS, EITHER OF WHICH SHALL NOT EXCEED 0.006[0.152] PER SIDE.

