

FEATURES

- 230ps propagation delay
- High bandwidth output transitions
- Internal 75K Ω input pull-down resistors
- Available in 8-pin SOIC package

DESCRIPTION

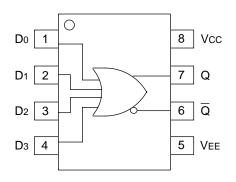
The SY10/100EL01 are 4-input OR/NOR gates. These devices are functionally equivalent to the E101 devices, with higher performance capabilities. With propagation delays and output transition times significantly faster than the E101, the EL01 is ideally suited for those applications which require the ultimate in AC performance.

PIN NAMES

Pin	Function
D0-D3	Data Inputs
Q	Data Outputs

Rev.: G Amendment:/0 Issue Date: March 2006

PACKAGE/ORDERING INFORMATION



8-Pin SOIC (Z8-1)

Ordering Information⁽¹⁾

Part Number	Package Type	Operating Range	Package Marking	Lead Finish	
SY10EL01ZC	Z8-1	Commercial	HEL01	Sn-Pb	
SY10EL01ZCTR ⁽²⁾	Z8-1	Commercial	HEL01	Sn-Pb	
SY100EL01ZC	Z8-1	Commercial	XEL01	Sn-Pb	
SY100EL01ZCTR ⁽²⁾	Z8-1	Commercial	XEL01	Sn-Pb	
SY10EL01ZI	Z8-1	Industrial	HEL01	Sn-Pb	
SY10EL01ZITR ⁽²⁾	Z8-1	Industrial	HEL01	Sn-Pb	
SY100EL01ZI	Z8-1	Industrial	XEL01	Sn-Pb	
SY100EL01ZITR ⁽²⁾	Z8-1	Industrial	XEL01	Sn-Pb	
SY10EL01ZG ⁽³⁾	Z8-1	Industrial	HEL01 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY10EL01ZGTR ^(2, 3)	Z8-1	Industrial	HEL01 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY100EL01ZG ⁽³⁾	Z8-1	Industrial	XEL01 with Pb-Free bar-line indicator	Pb-Free NiPdAu	
SY100EL01ZGTR ^(2, 3)	Z8-1	Industrial	XEL01 with Pb-Free bar-line indicator	Pb-Free NiPdAu	

Notes:

- 1. Contact factory for die availability. Dice are guaranteed at T_A = 25°C, DC Electricals only.
- 2. Tape and Reel.
- 3. Pb-Free package is recommended for new designs.

DC ELECTRICAL CHARACTERISTICS

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

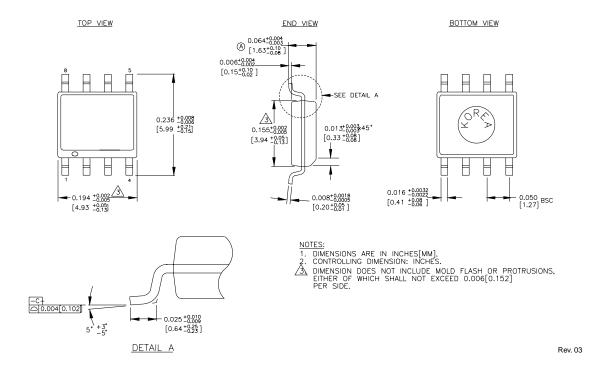
		TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			
Symbol	Parameter	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
IEE	Power Supply Current													mA
	10EL	_	14	17	11	14	17	11	14	17	11	14	17	
	100EL	_	14	17	11	14	17	11	14	17	13	16	20	
VEE	Power Supply Voltage													V
	10EL	-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	
Iн	Input HIGH Current		_	150	_	_	150	_	_	150	_	_	150	μΑ

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
tPD	Propagation Delay to Output D	70	220	370	120	220	320	130	230	330	150	250	350	ps
tr tf	Output Rise/Fall Times Q (20% to 80%)	70	225	350	100	225	350	100	225	350	100	225	350	ps

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



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