

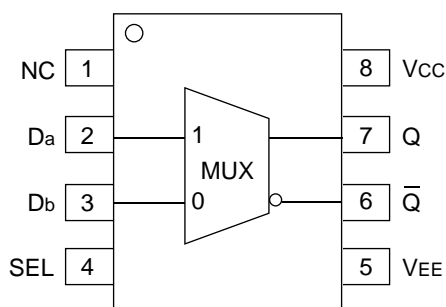
FEATURES

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

DESCRIPTION

The SY10/100EL58 are 2:1 multiplexers. These devices are functionally equivalent to the E158 devices, with higher performance capabilities. With propagation delays and output transition times significantly faster than the E158, the EL58 is ideally suited for those applications which require the ultimate in AC performance.

PIN CONFIGURATION/BLOCK DIAGRAM



**SOIC
TOP VIEW**

TRUTH TABLE

SEL	Data
H	a
L	b

PIN NAMES

Pin	Function
Da, Db	Data Inputs
Q	Data Outputs
SEL	Select Input

DC ELECTRICAL CHARACTERISTICSV_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = GND

Symbol	Parameter	T _A = -40°C			T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
I _{EE}	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	19	
V _{EE}	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 _{IH}	Input HIGH Current	—	—	150	—	—	150	—	—	150	—	—	150	μA

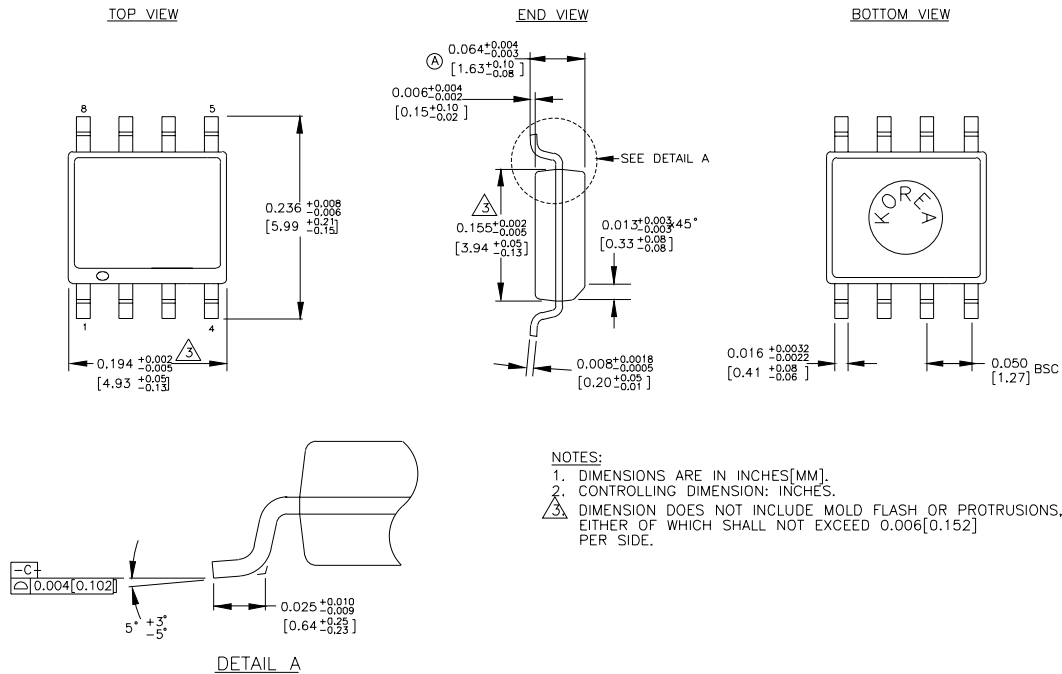
AC ELECTRICAL CHARACTERISTICSV_{EE} = V_{EE} (Min.) to V_{EE} (Max.); V_{CC} = GND

Symbol	Parameter	T _A = -40°C			T _A = 0°C			T _A = +25°C			T _A = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
t _{PLH}	Propagation Delay to Output D	60	220	380	110	220	330	120	230	340	140	250	360	ps
t _{PHL}		90	250	410	140	250	360	150	260	370	170	280	390	
t _r t _f	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
SY10EL58ZC	Z8-1	Commercial
SY10EL58ZCTR	Z8-1	Commercial
SY100EL58ZC	Z8-1	Commercial
SY100EL58ZCTR	Z8-1	Commercial

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



Rev. 03

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