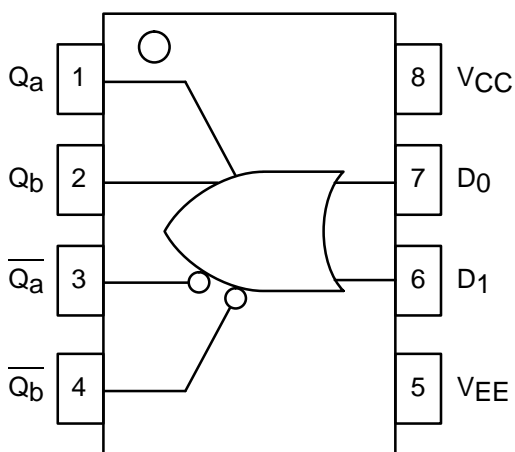


## Low Impedance Driver

The MC100LVEL12 is a low impedance drive buffer. With two pairs of OR/NOR outputs the device is ideally suited for high drive applications such as memory addressing. The device is a function equivalent to the EL12 device and operates from a low voltage power supply. With propagation delays equivalent to the EL12, the LVEL12 is ideally suited for those applications which require the ultimate in AC performance in a low voltage environment.

- 445ps Propagation Delay
- Dual Outputs for 25Ω Drive Applications
- 75kΩ Internal Input Pulldown Resistors
- >2000V ESD Protection

### LOGIC DIAGRAM AND PINOUT ASSIGNMENT



## MC100LVEL12



**D SUFFIX**  
8-LEAD PLASTIC SOIC PACKAGE  
CASE 751-05

### PIN DESCRIPTION

PIN	FUNCTION
D0, D1	Data Inputs
Qa, Qb	Data Outputs

### DC CHARACTERISTICS ( $V_{EE} = V_{EE}(\text{min})$ to $V_{EE}(\text{max})$ ; $V_{CC} = \text{GND}$ )

Symbol	Characteristic	-40°C			0°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
$I_{EE}$	Power Supply Current		17	24		17	24		17	24		18	25	mA
$V_{EE}$	Power Supply Voltage	-3.0		-3.8	-3.0		-3.8	-3.0		-3.8	-3.0		-3.8	V
$I_{IH}$	Input HIGH Current			150			150			150			150	μA

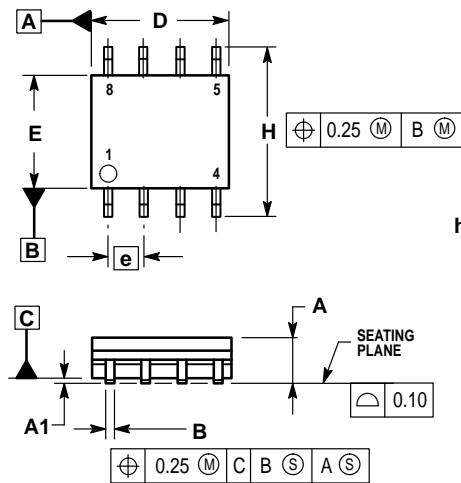
### AC CHARACTERISTICS ( $V_{EE} = V_{EE}(\text{min})$ to $V_{EE}(\text{max})$ ; $V_{CC} = \text{GND}$ )

Symbol	Characteristic	-40°C			0°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
$t_{PLH}$ $t_{PHL}$	Propagation Delay to Output	310		580	310		580	310	445	580	320		590	ps
$t_r$ $t_f$	Output Rise/Fall Times Q (20% - 80%)	230	400	550	230	400	550	230	400	550	230	400	550	ps



OUTLINE DIMENSIONS

D SUFFIX  
PLASTIC SOIC PACKAGE  
CASE 751-05  
ISSUE S



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
  2. DIMENSIONS ARE IN MILLIMETERS.
  3. DIMENSION D AND E DO NOT INCLUDE MOLD PROTRUSION.
  4. MAXIMUM MOLD PROTRUSION 0.15 PER SIDE.
  5. DIMENSION B DOES NOT INCLUDE MOLD PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127 TOTAL IN EXCESS OF THE B DIMENSION AT MAXIMUM MATERIAL CONDITION.

DIM	MILLIMETERS	
	MIN	MAX
A	1.35	1.75
A1	0.10	0.25
B	0.35	0.49
C	0.18	0.25
D	4.80	5.00
E	3.80	4.00
e	1.27 BSC	
H	5.80	6.20
h	0.25	0.50
L	0.40	1.25
θ	0°	7°

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