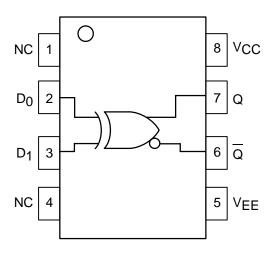
2-Input XOR/XNOR

The MC10EL/100EL07 is a 2-input XOR/XNOR gate. The device is functionally equivalent to the E107 device 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.

- 260ps Propagation Delay
- High Bandwidth Output Transitions
- 75kΩ Internal Input Pulldown Resistors
- >1000V ESD Protection

12/93

LOGIC DIAGRAM AND PINOUT ASSIGNMENT



MC10EL07 MC100EL07



PIN DESCRIPTION FUNCTION PIN D0, D1 **Data Inputs Data Outputs**

DC CHARACTERISTICS (VEE = VEE(min) to VEE(max); VCC = GND)

			-40°C		0°C			25°C			85°C			
Symbol	Characteristic	Mir	Тур	Max	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Unit
IEE	Power Supply Current 10E 100		14 14	17 17		14 14	17 17		14 14	17 17		14 16	17 20	mA
VEE	Power Supply Voltage 10E 100			-5.5 -5.5	-4.94 -4.20	-5.2 -4.5	-5.5 -5.5	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	٧
lН	Input HIGH Current D0 D1			250 150			250 150			250 150			250 150	μΑ

AC CHARACTERISTICS (VEE = VEE(min) to VEE(max); VCC = GND)

		-40°C			0°C			25°C			85°C			
Symbol	Characteristic	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Unit
^t PLH ^t PHL	Propagation Delay to Output	90	250	435	140	250	385	150	260	395	170	280	415	ps
t _r t _f	Output Rise/Fall Times Q (20% – 80%)	100	225	350	100	225	350	100	225	350	100	225	350	ps

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OUTLINE DIMENSIONS

D SUFFIX PLASTIC SOIC PACKAGE CASE 751-05 ISSUE P Seating Plane O.25 (0.010) M T B S A S

NOTES:

- DIMENSIONS A AND B ARE DATUMS AND T IS A DATUM SURFACE.
- DIMENSIONING AND TOLERANCING PER ANSI Y14 5M 1982
- 3. DIMENSIONS ARE IN MILLIMETER.
- DIMENSION A AND B DO NOT INCLUDE MOLD PROTRUSION.
- 5. MAXIMUM MOLD PROTRUSION 0.15 PER SIDE. 6. DIMENSION D DOES NOT INCLUDE MOLD
- DIMENSION D DOES NOT INCLUDE MOLD PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127 TOTAL IN EXCESS OF THE D DIMENSION AT MAXIMUM MATERIAL CONDITION.

	MILLIMETERS							
DIM	MIN	MAX						
Α	4.80	5.00						
В	3.80	4.00						
С	1.35	1.75						
D	0.35	0.49						
F	0.40	1.25						
G	1.27	BSC						
J	0.18	0.25						
K	0.10	0.25						
М	0 °	7 °						
Р	5.80	6.20						
R	0.25	0.50						

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