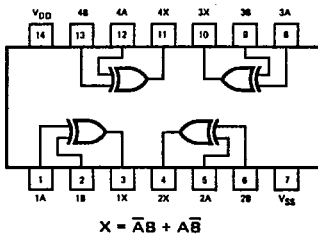


# GD4030B

## QUAD EXCLUSIVE—OR GATE

**DESCRIPTION** — The 4030B CMOS logic element provides the Exclusive-OR function. The outputs are fully buffered for best performance. The 4030B is a direct replacement for the 74C86/54C86 and the 14507.

**F4030 QUAD EXCLUSIVE-OR GATE**



**NOTE:**  
The SO Package has the same pinouts (Connection Diagram) as the Dual In-line Package.

**DC CHARACTERISTICS:**  $V_{DD}$  as shown,  $V_{SS} = 0$  V (See Note 1)

SYMBOL	PARAMETER	LIMITS									UNITS	TEMP	TEST CONDITIONS	
		$V_{DD} = 5$ V			$V_{DD} = 10$ V			$V_{DD} = 15$ V						
		MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX				
$I_{DD}$	Quiescent Power Supply Current	XC			1			2			4	$\mu$ A	MIN, 25°C	All inputs at 0 V or $V_{DD}$
					7.5			15			30		MAX	
		XM			0.25			0.5			1	$\mu$ A	MIN, 25°C	
					7.5			15			30		MAX	

**AC CHARACTERISTICS:**  $V_{DD}$  as shown,  $V_{SS} = 0$  V,  $T_A = 25^\circ$  C (See Note 2)

SYMBOL	PARAMETER	LIMITS									UNITS	TEST CONDITIONS
		$V_{DD} = 5$ V			$V_{DD} = 10$ V			$V_{DD} = 15$ V				
		MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX		
$t_{PLH}$	Propagation Delay, A or B to X		85	170		45	90		27	72	ns	$C_L = 50$ pF, $R_L = 200$ k $\Omega$
$t_{PHL}$			85	170		45	90		27	72	ns	
$t_{TLH}$	Output Transition Time		50	100		23	50		17	35	ns	Input Transition Times < 20 ns
$t_{THL}$			50	100		23	50		17	35	ns	

**NOTES:**

- Additional DC Characteristics are listed in this section under 4000B Series CMOS Family Characteristics.
- Propagation Delays and Output Transition Times are graphically described in this section under 4000B Series CMOS Family Characteristics.

### TYPICAL ELECTRICAL CHARACTERISTICS

