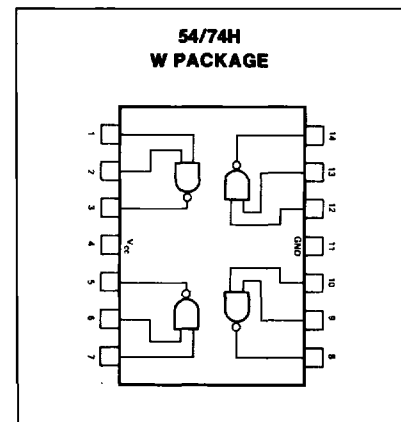
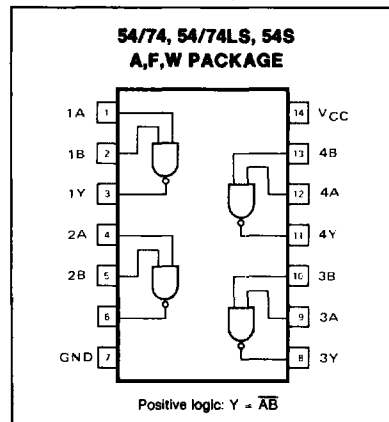


SPEED/PACKAGE AVAILABILITY

54 F,W	74 A,F
54H F,W	74H A,F
54LS F,W	74LS A,F
54S F,W	74S A,F

PIN CONFIGURATION



SWITCHING CHARACTERISTICS $V_{CC} = 5V$, $T_A = 25^\circ C$

TEST CONDITIONS	54/74			54/74H			54/74LS			54/74S			UNIT
	$C_L = 15\text{pF}$ $R_L = 400\Omega$			$C_L = 25\text{pF}$ $R_L = 280\Omega$			$C_L = 15\text{pF}$ $R_L = 2\text{k}\Omega$			$C_L = 15\text{pF}$ $R_L = 280\Omega$			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
Propagation delay time t_{PLH} Low-to-high		11	22		5.9	10		9	15	2	3 $C_L = 50\text{pF}$ 4.5	4.5	ns
t_{PHL} High-to-low		7	15		6.2	10		10	15	2	3 $C_L = 50\text{pF}$ 5	5	ns

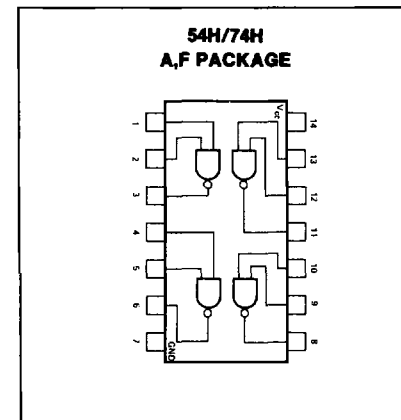
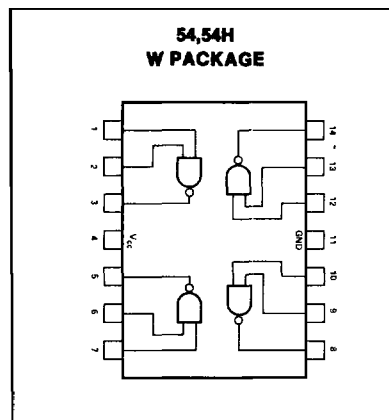
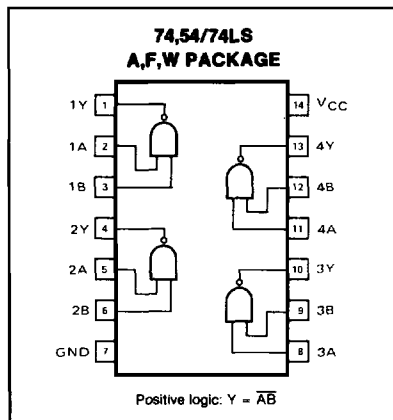
Load circuit and typical waveforms are shown at the front of section.

QUAD 2-INPUT NAND GATE W/OPEN COLLECTOR OUTPUTS

SPEED/PACKAGE AVAILABILITY

54 F,W	74 A,F
54H F,W	74H A,F
54LS F,W	74LS A,F

PIN CONFIGURATION



SWITCHING CHARACTERISTICS $V_{CC} = 5V$, $T_A = 25^\circ C$

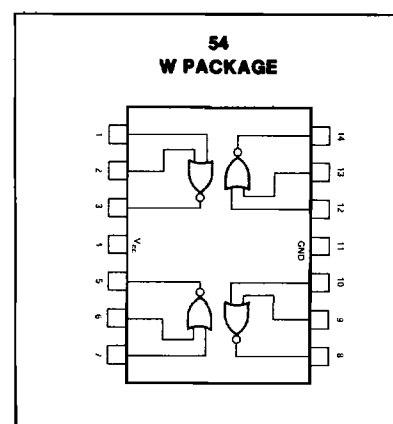
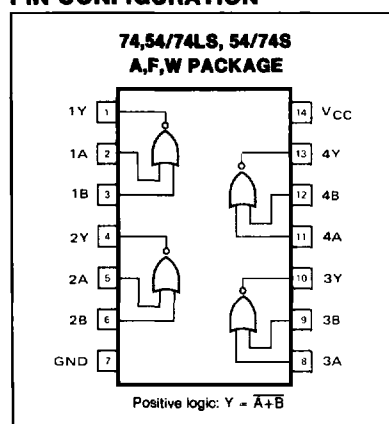
TEST CONDITIONS	54/74			54/74H			54/74LS			
	$C_L = 15pF$ $R_L = 400\Omega$			$C_L = 25pF$ $R_L = 280\Omega$			$C_L = 15pF$ $R_L = 2k\Omega$			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	UNIT
Propagation delay time										
t_{PLH} Low-to-high		35	45		10	15		17	32	ns
t_{PHL} High-to-low		8	15		7.5	12		15	28	ns

Load circuit and typical waveforms are shown at the front of section.

SPEED/PACKAGE AVAILABILITY

54	F,W	74	A,F
54LS	F,W	74LS	A,F
54S	F,W	74S	A,F

PIN CONFIGURATION



SWITCHING CHARACTERISTICS $V_{CC} = 5V$, $T_A = 25^\circ C$

TEST CONDITIONS	54/74			54/74LS			54/74S			UNIT
	$C_L = 15pF$ $R_L = 400\Omega$			$C_L = 15pF$ $R_L = 2k\Omega$			$C_L = 15pF$ $R_L = 280\Omega$			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	UNIT
Propagation delay time										
t_{PLH} Low-to-high		12	22		8	15		3.5	5.5	ns
t_{PHL} High-to-low		8	15		8	15		3.5	5.5	ns

Load circuit and typical waveforms are shown at the front of section.