

SPEED/PACKAGE AVAILABILITY

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

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

TEST CONDITIONS	54/74			54/74LS			UNIT
	$C_L = 15pF$ $R_L = 400\Omega$			$C_L = 15pF$ $R_L = 2k\Omega$			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	
Propagation delay time							
t_{PLH} Low-to-high		18	27		18	27	ns
t_{PHL} High-to-low		15	22		15	22	ns

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

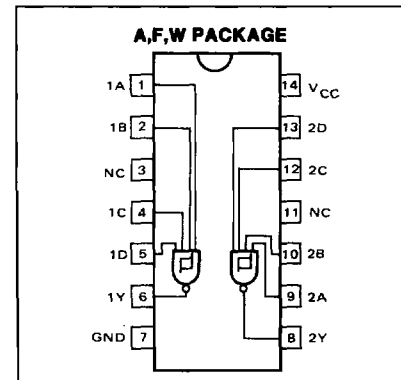
HYSTERESIS THRESHOLDS

PARAMETER	54/74			54/74LS			UNITS
	MIN	TYP	MAX	MIN	TYP	MAX	
V_T+ positive going threshold	1.5	1.7	2.0	1.5	1.7	1.9	V
V_T- negative going threshold	0.6	0.9	1.1	0.6	0.8	1.0	V
Hysteresis	0.4	0.8					V

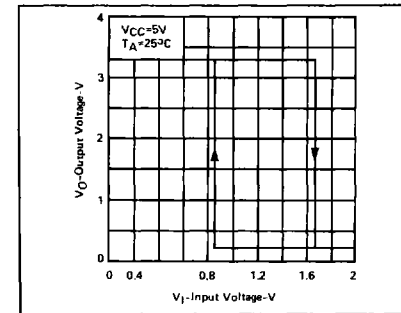
HYSTERESIS VS. TEMPERATURE-TYPICAL VALUES

PARAMETER	54/74LS			UNIT
	-55°C	25°C	+125°C	
V_{T+} Positive going threshold	1.75	1.71	1.68	V
V_{T-} Negative going threshold	.91	.83	.86	V
Hysteresis	.84	.83	.82	V

PIN CONFIGURATION



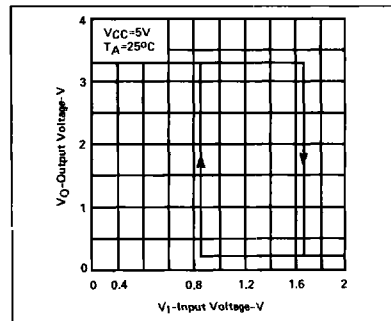
OUTPUT VOLTAGE vs. INPUT VOLTAGE



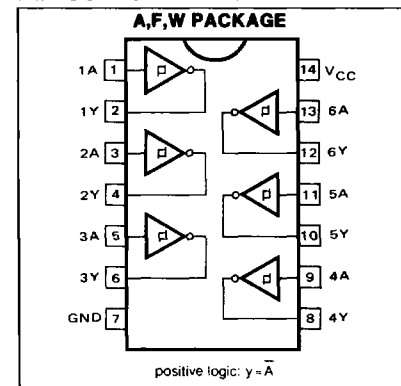
SPEED/PACKAGE AVAILABILITY

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

OUTPUT VOLTAGE vs. INPUT VOLTAGE



PIN CONFIGURATION



HYSTERESIS VS. TEMPERATURE-TYPICAL VALUES

PARAMETER	54/74LS			UNIT
	-55°C	+25°C	+125°C	
V _{T+} Positive going threshold	1.75	1.71	1.68	V
V _{T-} Negative going threshold	.91	.88	.86	V
Hysteresis	.84	.83	.82	V

HYSTERESIS THRESHOLDS

	54/74			54/74LS			UNIT
	MIN	TYP	MAX	MIN	TYP	MAX	
V _{T+}	1.5	1.7	2.0	1.5	1.7	1.9	V
V _{T-}	0.6	0.9	1.1	0.6	0.8	1.0	
Hysteresis	0.4	0.8					

SWITCHING CHARACTERISTICS V_{CC} = 5V, T_A = 25°C

TEST CONDITIONS	54/74			54/74LS			UNIT
	C _L = 15pF R _L = 400Ω			C _L = 15pF R _L = 2kΩ			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	UNIT
Propagation delay time t _{PLH} Low-to-high		15	22		15	22	ns
t _{PHL} High-to-low		15	22		15	22	ns

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

TRIPLE 3-INPUT AND GATE W/OPEN COLLECTOR OUTPUTS

SPEED/PACKAGE AVAILABILITY

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

SWITCHING CHARACTERISTICS V_{CC} = 5V, T_A = 25°C

TEST CONDITIONS	54/74LS			54/74S			UNIT
	C _L = 15pF R _L = 2kΩ			C _L = 15pF R _L = 280Ω			
PARAMETER	MIN	TYP	MAX	MIN	TYP	MAX	UNIT
Propagation delay time t _{PLH} Low-to-high		20	35	2.5	5.5 C _L = 50pF 8.5	8.5	ns
t _{PHL} High-to-low		20	35	2.5	6 C _L = 50pF 8	9	ns

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

PIN CONFIGURATION

