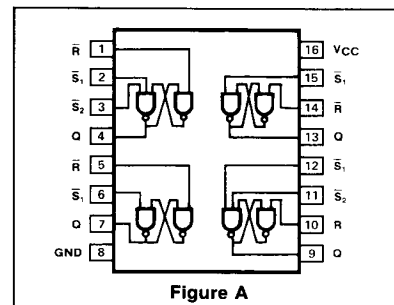


**54/74279
54LS/74LS279**

ORDERING CODE (See Section 9 for further Package and Ordering Information.)

PACKAGES	PIN CONF.	COMMERCIAL RANGES $V_{CC} = 5V \pm 5\%$; $T_A = 0^\circ C$ to $-70^\circ C$		MILITARY RANGES $V_{CC} = 5V \pm 10\%$; $T_A = -55^\circ C$ to $+125^\circ C$	
Plastic DIP	Fig. A	N74279N	• N74LS279N		
Ceramic DIP	Fig. A	N74279F	• N74LS279F	S54279F	• S54LS279F
Flatpak	Fig. A			S54279W	• S54LS279W

PIN CONFIGURATION



INPUT AND OUTPUT LOADING AND FAN-OUT TABLE (a)

PINS		54/74	54H/74H	54S/74S	54LS/74LS
Inputs	I_{IH} (μA) I_{IL} (mA)	40 -1.6			20 -0.4
Outputs	I_{OH} (μA) I_{OL} (mA)	-800 16			-400 4/8 (a)

TRUTH TABLE

INPUTS			OUTPUT
$\bar{S}_1$	$\bar{S}_2$	$\bar{R}$	Q
L	L	L	h
L	X	H	H
X	L	H	H
H	H	L	L
H	H	H	No change

L = LOW voltage level.
H = HIGH voltage level.
X = Don't care.
h = The output is HIGH as long as $\bar{S}_1$ or $\bar{S}_2$ is LOW.
If all inputs go HIGH simultaneously, the output state is indeterminate; otherwise it follows the truth table.

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (b)

PARAMETER	TEST CONDITIONS	54/74		54H/74H		54S/74S		54LS/74LS		UNIT
		Min	Max	Min	Max	Min	Max	Min	Max	
I_{CC} Supply current	$V_{CC} = \text{Max}$, $V_R = 0V$, $V_S = 4.5V$		30						7.0	mA

AC CHARACTERISTICS $T_A = 25^\circ C$ (See Section 4 for Waveforms and Conditions.)

PARAMETER		TEST CONDITIONS	54/74		54H/74H		54S/74S		54LS/74LS		UNIT
			$C_L = 15\text{pF}$ $R_L = 400\Omega$						$C_L = 15\text{pF}$ $R_L = 2\text{k}\Omega$		
			Min	Max	Min	Max	Min	Max	Min	Max	
tPLH	Propagation delay			22						22	ns
tPHL	Set to output			15						15	ns
tPHL	Propagation delay			27						27	ns
	Reset to output										

NOTES

- The slashed numbers indicate different parametric values for Military/Commercial temperature ranges respectively.
- For family dc characteristics see inside front cover for 54/74 and 54H/74H, and see inside back cover for 54S/74S and 54LS/74LS specification.