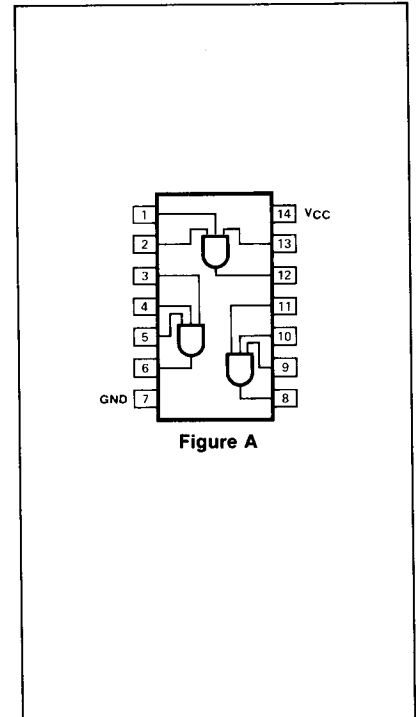


**54S/74S15  
54LS/74LS15**

**PIN CONFIGURATION**

**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	N74S15N • N74LS15N	
Ceramic DIP	Fig. A	N74S15F • N74LS15F	S54S15F • S54LS15F
Flatpak	Fig. A		S54S15W • S54LS15W



**INPUT AND OUTPUT LOADING AND FAN-OUT TABLE <sup>(a)</sup>**

PINS		54/74	54H/74H	54S/74S	54LS/74LS
Inputs	$I_{IH}$ ( $\mu A$ )			50	20
	$I_{IL}$ (mA)			-2.0	-0.36
Outputs	$I_{OH}$ ( $\mu A$ )			+250	+100
	$I_{OL}$ (mA)			20	4/8 <sup>(a)</sup>

**DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE <sup>(b)</sup>**

PARAMETER	TEST CONDITIONS	54/74		54H/74H		54S/74S		54LS/74LS		UNIT
		Min	Max	Min	Max	Min	Max	Min	Max	
$I_{CCH}$ Supply current	$V_{CC} = \text{Max}$ , $V_{IN} \geq 4.5V$						19.5		3.6	mA
$I_{CCL}$ Supply current	$V_{CC} = \text{Max}$ , $V_{IN} = 0V$						42		6.6	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
		Min	Max	Min	Max	Min	Max	Min	Max	
$t_{PLH}$ Propagation delay	Waveform 2						8.5		35	ns
$t_{PHL}$ Propagation delay	Waveform 2						9.0		35	ns

**NOTE**

- a. The slashed numbers indicate different parametric values for Military/Commercial temperature ranges respectively.
- b. 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.