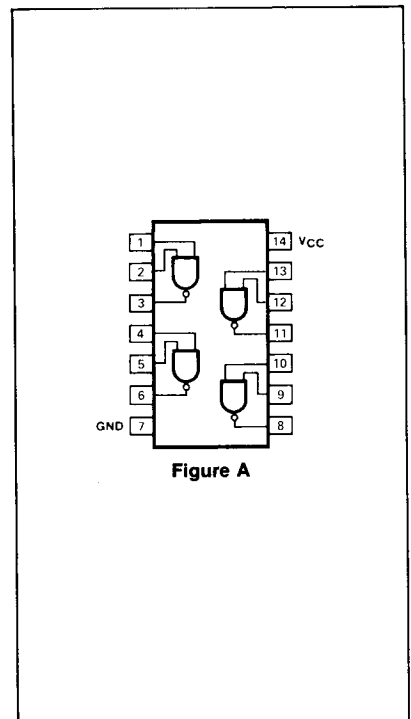


**54/7403
54S/74S03
54LS/74LS03**

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 Fig. A	N7403N • N74S03N N74LS03N	
Ceramic DIP	Fig. A Fig. A	N7403F • N74S03F N74LS03F	S5403F • S54S03F S54LS03F
Flatpak	Fig. A Fig. A		S5403W S54S03W • S54LS03W



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

PINS		54/74	54H/74H	54S/74S	54LS/74LS
Inputs	I_{IH} (μA)	40		50	20
	I_{IL} (mA)	-1.6		-2.0	-0.36
Outputs	I_{OH} (μA)	+250		+250	+100
	I_{OL} (mA)	16		20	4/8 ^(a)

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (See Note b)

PARAMETER	TEST CONDITIONS	54/74		54H/74H		54S/74S		54LS/74LS		UNIT
		Min	Max	Min	Max	Min	Max	Min	Max	
I_{CCH}	Supply current	$V_{CC} = \text{Max}, V_{IN} = 0V$			8.0			13.2	1.6	mA
I_{CCL}	Supply current	$V_{CC} = \text{Max}, V_{IN} \geq 4.5V$			22			36	4.4	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
		$C_L = 15 \text{ pF}$ $R_L = 400 \Omega$				$C_L = 15 \text{ pF}$ $R_L = 280 \Omega$		$C_L = 15 \text{ pF}$ $R_L = 2k \Omega$		
		Min	Max	Min	Max	Min	Max	Min	Max	
t_{PLH}	Propagation delay	Waveform 1			45 ^(c)			7.5	32	ns
t_{PHL}	Propagation delay	Waveform 1			15			7.0	28	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.
- c. $R_L = 4k \Omega$ for t_{PLH} .