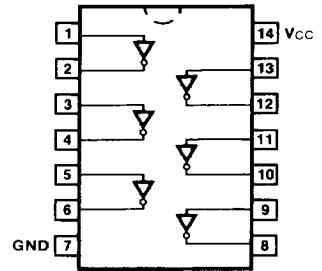


✓ 54/7404 010560  
 ✓ 54H/74H04 010564  
 ✓ 54S/74S04 110565  
 ✓ 54S/74S04A 010565  
 ✓ 54LS/74LS04 010563  
**HEX INVERTER**

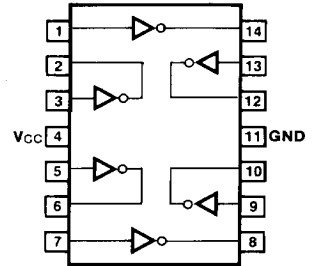
**CONNECTION DIAGRAMS**  
PINOUT A



**ORDERING CODE:** See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		V <sub>CC</sub> = +5.0 V ±5%, T <sub>A</sub> = 0°C to +70°C	V <sub>CC</sub> = +5.0 V ±10%, T <sub>A</sub> = -55°C to +125°C	
Plastic DIP (P)	A	7404PC, 74H04PC 74S04PC, 74S04APC 74LS04PC		9A
Ceramic DIP (D)	A	7404DC, 74H04DC 74S04DC, 74S04ADC 74LS04DC	5404DM, 54H04DM 54S04DM, 54S04ADM 54LS04DM	6A
Flatpak (F)	A	74S04FC, 74S04AFC 74LS04FC	54S04FM, 54S04AFM 54LS04FM	3I
	B	7404FC, 74H04FC	5404FM, 54H04FM	

**PINOUT B**



**INPUT LOADING/FAN-OUT:** See Section 3 for U.L. definitions

PINS	54/74 (U.L.) HIGH/LOW	54/74H (U.L.) HIGH/LOW	54/74S (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs	1.0/1.0	1.25/1.25	1.25/1.25	0.5/0.25
Outputs	20/10	12.5/12.5	25/12.5	10/5.0 (2.5)

**DC AND AC CHARACTERISTICS:** See Section 3\*

SYMBOL	PARAMETER	54/74		54/74H		54/74S		54/74LS		UNITS	CONDITIONS	
		Min	Max	Min	Max	Min	Max	Min	Max		V <sub>IN</sub> = Gnd	V <sub>CC</sub> = Max
I <sub>CC</sub> H	Power Supply Current	12	33	26	58	24	54	2.4	6.6	mA	V <sub>IN</sub> = Gnd	V <sub>CC</sub> = Max
I <sub>CC</sub> L	Current										V <sub>IN</sub> = Open	
t <sub>PLH</sub>	Propagation Delay	22	15	10	10	2.0	2.0	4.5	5.0	ns	Fig. 3-1, 3-4	
t <sub>PHL</sub>						1.0	1.0	3.5	4.0			
t <sub>PLH</sub>	Propagation Delay (54/74S04A only)					1.0	1.0	3.5	4.0	ns	Fig. 3-1, 3-4	
t <sub>PHL</sub>												

\*DC limits apply over operating temperature range; AC limits apply at T<sub>A</sub> = +25°C and V<sub>CC</sub> = +5.0 V.