

03

T-43-15

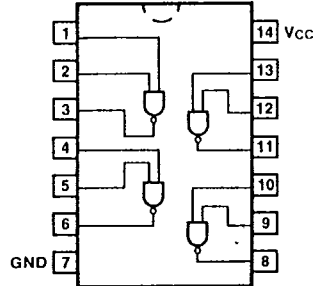
CONNECTION DIAGRAM  
PINOUT A

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

QUAD 2-INPUT NAND GATE  
(With Open-Collector Output)

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	7403PC, 74S03PC 74LS03PC		9A
Ceramic DIP (D)	A	7403DC, 74S03DC 74LS03DC	5403DM, 54S03DM 54LS03DM	6A
Flatpak (F)	A	7403FC, 74S03FC 74LS03FC	5403FM, 54S03FM 54LS03FM	3I



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

PINS	54/74 (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	0.5/0.25
Outputs	OC**/10	OC**/12.5	OC**/5.0 (2.5)

DC AND AC CHARACTERISTICS: See Section 3\*

SYMBOL	PARAMETER	54/74		54/74S		54/74LS		UNITS	CONDITIONS	
		Min	Max	Min	Max	Min	Max		V <sub>IN</sub> = Gnd	V <sub>CC</sub> = Max
I <sub>CC</sub> H	Power Supply Current	8.0		13.2		1.6		mA	V <sub>IN</sub> = Gnd	V <sub>CC</sub> = Max
I <sub>CC</sub> L		22		36		4.4			V <sub>IN</sub> = Open	
t <sub>PLH</sub>	Propagation Delay	45	2.0	7.5	22	mA	Figs. 3-2, 3-4			
t <sub>PHL</sub>		15	2.0	7.0	18					

\*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.  
\*\*OC—Open Collector