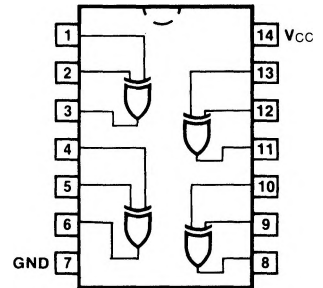


**54/7486**  
**54S/74S86**  
**54LS/74LS86**

**QUAD 2-INPUT EXCLUSIVE-OR GATE**

**CONNECTION DIAGRAM**  
**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	7486PC, 74S86PC 74LS86PC		9A
Ceramic DIP (D)	A	7486DC, 74S86DC 74LS86DC	5486DM, 54S86DM 54LS86DM	6A
Flatpak (F)	A	7486FC, 74S86FC 74LS86FC	5486FM, 54S86FM 54LS86FM	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	1.0/0.375
Outputs	20/10	25/12.5	10/5.0 (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		
I <sub>CC</sub>	Power Supply Current	XM		43	75	10		mA	V <sub>CC</sub> = Max, V <sub>IN</sub> = Gnd
		XC		50	75	10			
t <sub>PLH</sub>	Propagation Delay	23	3.5	10.5	12	ns	Other Input LOW Figs. 3-1, 3-5		
t <sub>PHL</sub>		17	3.0	10	17				
t <sub>PLH</sub>	Propagation Delay	30	3.5	10.5	13	ns	Other Input HIGH Figs. 3-1, 3-4		
t <sub>PHL</sub>		22	3.0	10	12				

\*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.