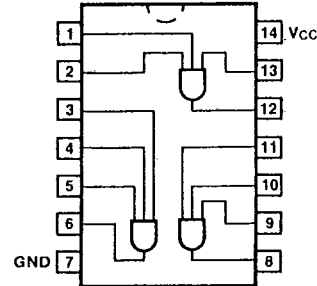


**54S/74S15**  
**54LS/74LS15**

TRIPLE 3-INPUT AND GATE  
(With Open-Collector Outputs)

**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	74S15PC, 74LS15PC		9A
Ceramic DIP (D)	A	74S15DC, 74LS15DC	54S15DM, 54LS15DM	6A
Flatpak (F)	A	74S15FC, 74LS15FC	54S15FM, 54LS15FM	3I

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

PINS	54/74S (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs	1.25/1.25	0.5/0.25
Outputs	OC**/12.5	OC**/5.0 (2.5)

DC AND AC CHARACTERISTICS: See Section 3\*

SYMBOL	PARAMETER	54/74S		54/74LS		UNITS	CONDITIONS	
		Min	Max	Min	Max		V <sub>IN</sub> = Open	V <sub>CC</sub> = Max
I <sub>CC</sub> H	Power Supply		19.5		3.6	mA		
I <sub>CC</sub> L	Current		42		6.6		V <sub>IN</sub> = Gnd	
t <sub>PLH</sub> t <sub>PHL</sub>	Propagation Delay		8.5 9.0		20 15	ns	Figs. 3-2, 3-5	

\*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