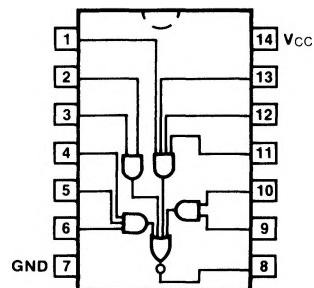


**54S/74S65****4-2-3-2-INPUT AND-OR-INVERT GATE**

(With Open-Collector Output)

**CONNECTION DIAGRAM  
PINOUT A****ORDERING CODE:** See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0\text{ V} \pm 5\%$ , $T_A = 0^\circ\text{C to } +70^\circ\text{C}$	$V_{CC} = +5.0\text{ V} \pm 10\%$ , $T_A = -55^\circ\text{C to } +125^\circ\text{C}$	
Plastic DIP (P)	A	74S65PC		9A
Ceramic DIP (D)	A	74S65DC	54S65DM	6A
Flatpak (F)	A	74S65FC	54S65FM	3I

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

PINS	54/74S (U.L.) HIGH/LOW
Inputs	1.25/1.25
Outputs	OC <sup>1</sup> /12.5

**DC AND AC CHARACTERISTICS:** See Section 3<sup>2</sup>

SYMBOL	PARAMETER	54/74S		UNITS	CONDITIONS	
		Min	Max			
$I_{CCH}$	Power Supply Current		11	mA	$V_{IN} = 0\text{ V}$	$V_{CC} = \text{Max}$
$I_{CCL}$			16		Note 3	
$t_{PLH}$	Propagation Delay	2.0	7.5	ns	Figs. 3-2, 3-4	
$t_{PHL}$		2.0	8.5			

<sup>1</sup>OC — Open Collector<sup>2</sup>DC limits apply over operating temperature range; AC limits apply at  $T_A = +25^\circ\text{C}$  and  $V_{CC} = +5.0\text{ V}$ .<sup>3</sup> $I_{CCL}$  is measured with all inputs of one gate open and remaining inputs grounded.