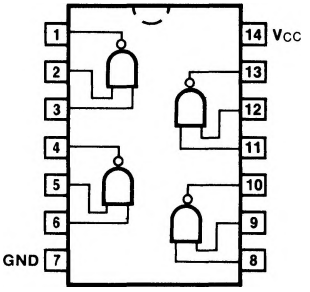
96101

QUAD 2-INPUT POSITIVE NAND BUFFER

(With Open-Collector Output)

DESCRIPTION — The 96101 is similar to the 54/7439, except that the outputs are specified at three levels of I_{OL}; in the HIGH state the I_{OH} current is specified at two levels of V_{OH}. During switching transitions, output current change rate is typically 4.0 mA/ns.

CONNECTION DIAGRAM
PINOUT A



ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		V_{CC} = +5.0 V ±5%, T_A = 0°C to +75°C	V_{CC} = +5.0 V ±10%, T_A = -55°C to +125°C	
Plastic DIP (P)	A	96101PC		9A
Ceramic DIP (D)	A	96101DC	96101DM	6A

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

PINS	96XX (U.L.) HIGH/LOW	
Inputs	1.0/1.0	
Outputs	OC**/30	

DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	96XX Min	96XX Max	UNITS	CONDITIONS	
V_{IH}	Input HIGH Voltage	2.0		V		
V_{IL}	Input LOW Voltage		0.8	V		
V_{OL}	Output LOW Voltage		0.4 0.5 0.6	V	I_{OL} = 48 mA I_{OL} = 60 mA I_{OL} = 80 mA	V_{CC} = Min V_{IN} = V_{IH}
I_{OH}	Output HIGH Current		25 50	µA	V_{OH} = 3.5 V V_{OH} = 5.5 V	V_{CC} = Min V_{IN} = V_{IL}
I_{IH}	Input HIGH Current		40 1.0	µA mA	V_{IN} = 2.4 V V_{IN} = 5.5 V	V_{CC} = Max
I_{IL}	Input LOW Current		-1.6	mA	V_{IN} = 0.4 V, V_{CC} = Max	
I_{CCH} I_{CCL}	Power Supply Current		8.5 54	mA	V_{IN} = Gnd V_{IN} = Open	V_{CC} = Max
t_{PLH} t_{PHL}	Propagation Delay Input to Output		22 25	ns	C_L = 45 pF, R_L = 120 Ω Figs. 3-2, 3-4	

*DC limits apply over operating temperature range; AC limits apply at T_A = +25°C and V_{CC} = +5.0 V. **OC — Open Collector