

96101 035025

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.

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 $+75^\circ\text{C}$	$V_{CC} = +5.0\text{ V} \pm 10\%$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$	
Plastic DIP (P)	A	96101PC		9A
Ceramic DIP (D)	A	96101DC	96101DM	6A

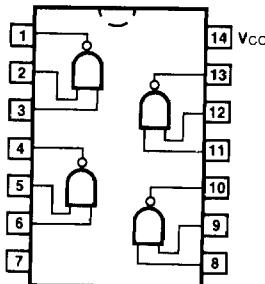
INPUT LOADING/FAN-OUT: See Section 3 for U.L. definitions

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

DC AND AC CHARACTERISTICS: See Section 3*

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

CONNECTION DIAGRAM PINOUT A



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