

Recommended Operating Conditions

SYMBOL	PARAMETER		MIN	NOM	MAX	UNIT
V_{CC}	Supply voltage	54	4.5	5	5.5	V
		74	4.75	5	5.25	
V_{OH}	High-level output voltage	54, 74			15	V
I_{OL}	Low-level output current	54			4	mA
		74			8	
T_A	Operating free-air temperature	54	-55		125	°C
		74	0		70	

Electrical Characteristics over recommended operating free-air temperature range (unless otherwise noted)

SYMBOL	PARAMETER	TEST CONDITIONS	MIN	TYP (Note 1)	MAX	UNIT
V_{IH}	High-level input voltage		2			V
V_{IL}	Low-level input voltage				0.8	V
V_{IK}	Input clamp voltage	$V_{CC} = \text{Min}, I_I = -12\text{mA}$			-1.5	V
I_{OH}	High-level output current	$V_{CC} = \text{Min}, V_{IL} = \text{Max}$	$V_{OH} = 12\text{V}$		50	μA
			$V_{OH} = 15\text{V}$		1000	
V_{OL}	Low-level output voltage	$V_{CC} = \text{Min}, V_{IL} = \text{Max},$	$I_{OL} = 4\text{mA}$	0.25	0.4	V
			$I_{OL} = \text{Max}$	0.35	0.5	
I_I	Input current at maximum input voltage	$V_{CC} = \text{Max}, V_I = 7\text{V}$			0.1	mA
I_{IH}	High-level input current	$V_{CC} = \text{Max}, V_{IH} = 2.7\text{V}$			20	μA
I_{IL}	Low-level input current	$V_{CC} = \text{Max}, V_{IL} = 0.4\text{V}$			-0.4	mA
I_{CCH}	Supply current total with outputs high	$V_{CC} = 5.25\text{V}$		0.8	1.6	mA
I_{CCL}	Supply current total with outputs low			2.4	4.4	mA

Note 1: All typical values are at $V_{CC} = 5\text{V}$, $T_A = 25^\circ\text{C}$.

Switching Characteristics, $V_{CC} = 5\text{V}$, $T_A = 25^\circ\text{C}$

SYMBOL	PARAMETER	TEST CONDITION#	MIN	TYP	MAX	UNIT
t_{PLH}	Propagation delay time, low-to-high-level output	$C_L = 15\text{pF}, R_L = 2\text{k}\Omega$		17	32	ns
t_{PHL}	Propagation delay time, high-to-low-level output			15	28	ns

#For load circuit and voltage wave forms, see page 3-11.