

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			5.5	V
I _{OL}	Low-level output current	54			12	mA
		74			24	
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	54			0.7	V	
		74			0.8		
V _{IK}	Input clamp voltage	V _{CC} =Min, I _I =-18mA			-1.5	V	
I _{OH}	High-level output current	V _{CC} =Min, V _{OH} =Max, V _{IL} =Max			250	μA	
V _{OL}	Low-level output voltage	V _{CC} =Min	I _{OL} =12mA	54, 74	0.25	0.4	V
		V _{IH} =Min	I _{OL} =24mA	74	0.35	0.5	
I _I	Input current at maximum input voltage	V _{CC} =Max, V _I =7V			0.1	mA	
I _{IH}	High-level input current	V _{CC} =Max, V _I =2.7V			20	μA	
I _{IL}	Low-level input current	V _{CC} =Max, V _I =0.4V			-0.4	mA	
I _{CCH}	Supply current	Total with outputs high	V _{CC} =Max		0.9	2	mA
I _{CCL}		Total with outputs low	V _{CC} =Max		6	12	mA

Note 1: All typical values are at V_{CC}=5V, T_A=25°C.

Switching Characteristics, V_{CC} = 5V, T_A = 25°C

SYMBOL	PARAMETER	TEST CONDITION#	MIN	TYP	MAX	UNIT
t _{PLH}	Propagation delay time, low-to-high-level output	C _L = 45pF, R _L = 667 Ω		20	32	ns
t _{PHL}	Propagation delay time, high-to-low-level output			18	28	ns

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