

54HSC/T521

8-Bit Magnitude Comparator

General Description

The 54HSC/T238 is a 3-Line to 8-Line Decoder/Multiplexer, with unlatched inputs and non-inverted outputs..

SYMBOL	PARAMETERS	TEST CONDITIONS	LIMITS				UNITS
			+25oC		- 55 / +125oC		
			MIN	MAX	MIN	MAX	
IDD	QUIESANT CURRENT	Vin = 0V or VDD	-	20	-	600	μA
IOL	OUTPUT (SINK) CURRENT	Vout = 0.2v	4.0	-	4.0	-	mA
IOH	OUTPUT (SOURCE) CURRENT	Vout = VDD-0.4V	-4.8	-	-4.8	-	mA
VOL	OUPUT VOLTAGE LOW LEVEL	IOL = 9mA	-	0.4	-	0.4	V
VOH	OUTPUT VOLTAGE HIGH LEVEL	IOH = -11mA	2.5	-	2.5	-	V
VIL 1	VOLTAGE INPUT LOW (CMOS)	-	-	1.5	-	1.5	V
VIH 1	VOLTAGE INPUT HIGH (CMOS)	-	3.5	-	3.5	-	V
VIL 2	VOLTAGE INPUT LOW (TTL)	-	-	0.8	-	0.8	V
VIH 2	VOLTAGE INPUT HIGH (TTL)	-	2.0	-	2.0	-	V
I in	INPUT LEAKAGE CURRENT	Vin =VDD or VSS	-	± 0.5	-	± 5.0	μA

Dynamic IDD at 5MHz ≤ 10mA

SYMBOL	PARAMETER	+25		-55/+125oC		UNITS
		TYP	MAX	TYP	MAX	
tPLH	PROPAGATION DELAY P or Q to PN = QN	15	25	18	28	ns
tPHL	PROPAGATION DELAY P or Q to PN = QN	16	25	19	28	ns
tPLH	PROPAGATION DELAY GN to PN = QN	14	25	17	28	ns
tPHL	PROPAGATION DELAY GN to PN = QN	15	25	18	28	ns

VDD = 4.5V, TMAX = +125oC, CL = 50pF