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NTE74H05
Integrated Circuit
TTL – High Speed,
Hex Inverter with Open Collector Outputs
14–Lead DIP

Recommended Operating Conditions:

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V_{CC}	4.75	5.0	5.25	V
Operating Temperature Range	T_A	0	+25	+125	°C
Input Loading for Each Input		–	–	1.25	U.L.

Electrical Characteristics: (Note 1, Note 2 unless otherwise specified)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Input HIGH Voltage	V_{IH}	Guaranteed Input HIGH Voltage		2.0	–	–	V
Input LOW Voltage	V_{IL}	Guaranteed Input LOW Voltage		–	–	0.8	V
Output HIGH Current	I_{OH}	V_{CC} – MIN, V_{OH} = 5.5V, V_{IN} = 0.8V		–	–	0.25	mA
Output LOW Voltage (On Level)	V_{OL}	V_{CC} = MIN, I_{OL} = 20mA, V_{IN} = 2.0V		–	–	0.4	V
Input HIGH Current	I_{IH}	V_{CC} = MAX, V_{IN} = 2.4V	Each Input	–	–	50	μA
		V_{CC} = MAX, V_{IN} = 5.5V		–	–	1.0	mA
Input LOW Current	I_{IL}	V_{CC} = MAX, V_{IN} = 0.4V		–	–	–2.0	mA
Supply Current HIGH	I_{CCH}	V_{CC} = MAX, V_{IN} = 0V		–	16	26	mA
Supply Current LOW	I_{CCL}	V_{CC} = MAX, V_{IN} = 4.5V		–	40	58	mA

Note 1. For conditions shown as MIN. or MAX., use the appropriate value specified under the “Recommended Operating Conditions”.

Note 2. Typical limits are at V_{CC} = 5.0V, +25°C.

Note 3. Not more than one output should be shorted at a time, and duration of short–circuit test should not exceed 1 second.

Switching Characteristics: (V_{CC} = 5V, C_L = 25pF, R_L = 280Ω unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn–Off Delay Input to Output	t_{PLH}		–	13	18	ns
Turn–On Delay Input to Output	t_{PHL}		–	10	15	ns

Pin Connection Diagram