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## NTE9936 Integrated Circuit DTL, Hex Inverter

**Description:**

The NTE9936 is a Diode Transistor Logic (DTL) Hex Inverter integrated circuit in a 14-Lead DIP type package. This device provides an excellent balance of speed, power dissipation, and noise immunity for general purpose digital application.

**Absolute Maximum Ratings:**

Supply Voltage	
Operating .....	4.5 to 5.5V
Continuous .....	8.0V
Pulsed (Less Than 1sec) .....	12V
Output Current (Into Outputs with Outputs Low)	
Continuous .....	30mA
Pulsed (Less Than 30ms) .....	90mA
Input Forward Current	
Continuous .....	-10mA
Pulsed (Less Than 30ms) .....	-30mA
Negative Voltage at Input	
Continuous .....	-0.5V
Pulsed (Less Than 30ms) .....	-1.58V
Input Reverse Current .....	1.0mA
Total Power Dissipation .....	66mW
Positive Voltage at Diode Input .....	5.5V
Maximum Junction Temperature .....	+150°C
Operating Temperature Range .....	0° to +75°C
Storage Temperature Range .....	-55° to +125°C

**Electrical Characteristics:** ( $V_{CC} = 5V$ ,  $T_A = +25^\circ C$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	$V_{OL}$	$I_{OL} = 12mA$ , $V_{IH} = 1.9V$	-	-	0.45	V
	$V_{OH}$	$I_{OH} = -120mA$ , $V_{IL} = 1.1V$	2.6	-	-	V
Short-Circuit Current	$I_{SC}$		-	-	-1.3	mA
Reverse Current	$I_R$	$V_R = 4V$	-	-	5	$\mu A$
Output Leakage Current	$I_{CEX}$	$V_{CEX} = 5V$	-	-	100	$\mu A$
Forward Current	$I_F$	$V_F = 450mV$	-	-	-1.4	mA
Power Drain Current (Total Device)	$I_{PDH}$		-	-	24	mA
Switching Times	$t_{pd(+)}$	$I_{OL} = 12mA$ (Pulse In), $I_{OH} = -120mA$ (Pulse Out)	25	-	80	ns
	$t_{pd(-)}$		10	-	30	ns

