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## NTE1050 Integrated Circuit Color TV Chroma Demodulator

**Description:**

The NTE1050 is a monolithic silicon integrated circuit which demodulates the chroma signal contained in a color television video signal and provides the R, G, and B signals at the outputs directly.

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Supply Voltage, $V_{CC}$	28V
Load Resistance, $R_L$	3k $\Omega$ Min.
Power Dissipation ( $T_A = +75^\circ\text{C}$ ), $P_D$	550mW
$e_A, e_B$	5V <sub>p-p</sub>
Chroma Input Signal, $e_C$	5V <sub>p-p</sub>
$e_Y$	-5V <sub>p-p</sub>
$V_{iBLANK}$	5V <sub>p-p</sub>
Operating Temperature Range, $T_{opt}$	-20° to +75°C
Storage Temperature Range, $T_{stg}$	-40° to +125°C

**Electrical Characteristics:** ( $T_A = 25^\circ\text{C}$ ,  $V_{CC} = 24\text{V}$ ,  $R_L = 3.3\text{k}\Omega$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	$I_{CC1}$	$R_L = 1\text{M}\Omega$	5	9	14	mA
	$I_{CC2}$	$R_L = 3.3\text{k}\Omega$	16	22	27	mA
	$\Theta_{DC1,2,4}$	-20°C ~ +75°C	-	0	±4	mV/°C
Chroma Input Signal	$e_C$	$E_{B-Y} = 5\text{V}_{p-p}$	-	0.4	0.7	V <sub>p-p</sub>
	$\Delta V_B$	$\Delta V_B = V_4 - V_{4B}$	0.8	1.5	3.0	V

### Pin Connection Diagram

