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## NTE1473 Integrated Circuit Color & Video Signal Processor

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

Supply Voltage, $V_{CC}$ .....	15V
Power Dissipation ( $T_A = 70^\circ\text{C}$ ), $P_T$ .....	850mW
Operating Temperature Range, $T_{opr}$ .....	-15 to $+70^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	-55 to $+125^\circ\text{C}$

**Electrical Characteristics:**

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Supply Current	$V_{CC} = 12V$	$I_{CC}$	31	41	59	mA
BPA Chroma Output	Burst: Chroma = 1:1 Burst = $90mV_{p-p}$	$E_C$	0.77	0.96	1.20	$V_{p-p}$
ACC Range	Burst: Chroma = 1:1, Burst = $13mV_{p-p}$	$E_a$	0.44	0.68	0.95	$V_{p-p}$
Killer Threshold	Burst: $90mV_{p-p} = 0dB$	$E_k$	-	-43	-	dB
APC Detection Sensitivity		$\mu$	-	16	-	mV/deg
VCO Control Sensitivity		$\beta$	-	5	-	Hz/mV
APC Pull in Range		$f_v$	$\pm 300$	-	-	Hz
Free-Running Frequency	Gate Off	$f_o$	-250	0	+250	Hz
VCO Output	measured at pin 4	$V_4$	-	0.9	-	$V_{p-p}$
C-Demod. Max Output	B-Y $f_{(beat)} = 10kHz$	$E_{bMax}$	3.70	5.1	-	$V_{p-p}$
C-Demod. Conversion Gain	R-Y	$G_{r-y}$	-	7.8	-	times
C-Demod. Conversion Ratio	B-Y/R-Y	$E_{b-y}$	-	1.28	-	times
		$E_{r-y}$	-	-	-	-
	G-Y/R-Y < (R-Y) - < (B-Y) = $105^\circ\text{C}$	$E_{g-y}$	-	0.40	-	times
		$E_{r-y}$	-	-	-	-
C-Demod. Carrier Leakage	3.58MHz BPF	$e_{car1}$	-	-	0.2	$V_{p-p}$
C-Demod. Harmonic Leakage	$1.2V_{p-p}$ CW, HPF	$e_{car2}$	-	-	0.2	$V_{p-p}$
Color Killer Leakage	Burst: Chroma = 1.1	$e_{kl}$	-	-	1.25	$mV_{rms}$

### Electrical Characteristics (Cont'd):

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Color Control Leakage	Burst: Chroma = 1.1	$e_{cl}$	-	-	1.25	$mV_{rms}$
C-Demod. Output Voltage	VCO	$E_{O(DC)}$	6.4	7.0	7.6	V
C-Demod. Output Differential DC Voltage	VCO (B-Y) - (R-Y) (R-Y) - (G-Y) (G-Y) - (B-Y)	$\Delta E_{O(DC)}$	0.3	0	0.3	V
Video Tone Response	$f = 2MHz/f = 100kHz$ $V_8 = V_{CC} \quad V_8 = 0$	$A_{5-1}$	-	8.4	-	dB
		$A_{5-2}$	-	0	-	
Contrast Amp. Gain	$V_{in} = 2V_{p-p} \quad V_6 = V_{CC}$ $f = 100kHz, \quad V_8 = GND$ $V_6 = 0$	$A_{5-3}$	-	1.03	-	times
		$A_{5-4}$	-	0.27	-	

### Pin Connection Diagram



