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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		μ	-	16	-	mV/deg
VCO Control Sensitivity		β	-	5	-	Hz/mV
APC Pull in Range		f_v	± 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°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



