

NTE1200 Integrated Circuit Color TV Chroma Processor

Applications:

- Subcarrier OSC
- Chroma Amplifier
- DC Chroma Gain Control
- Overload Detector
- ACC & Killer

Features:

- AFPC & ACC detector employs sample and Hold techniques
- Low output impedance
- Only the initial crystal filter tuning is required no killer and ACC adjustment at anytime
- Few external components required
- Compensation for temperature and Supply Variations
- Compatible with NTE1130

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

Supply Voltage, V_{CC}	13.2V
Chroma Input Voltage, e_c	4V _{p-p}
Pulse Input Voltage, e_p	4V _{peak}
Minimum Load Resistor, R_L	3.3k Ω
Power Dissipation, P_D	920mW

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ $V_{CC} = 11.2\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Static Characteristics						
Pin1 Voltage	V_1		1.3	2.0	2.7	V
Pin2, Pin3 Voltage	V_2, V_3		7.0	7.8	8.6	V
Pin4 Voltage	V_4		6.5	—	8.5	V
Pin6 Voltage	V_6		7.1	—	9.1	V
Pin7 Voltage	V_7		1.3	2.0	2.7	V
Pin8 Voltage	V_8		6.5	—	8.5	V
Pin9 Voltage	V_9	$I = -10\mu\text{A}$	-10	—	-5	V
Pin10, Pin11 Voltage	V_{10}, V_{11}		7.0	7.8	8.6	V
Pin13 Voltage	V_{13}		0.44	0.50	0.56	
Pin14 Voltage	V_{14}		6.4	—	7.5	V
Pin15 Voltage	V_{15}		9.0	—	10.5	V

Electrical Characteristics (Cont'd): ($T_A = +25^\circ\text{C}$ $V_{CC} = 11.2\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}		16	—	38	mA
Killer Sensitivity	e_{in}		—	—	25	mV _{P-P}
ACC Output		$e_{in} = 250\text{mV}_{P-P}$, SA = 2, V_{R1} MAX	—	1.35	—	mV _{P-P}
Killer Output	e_o	$e_{in} = 5\text{mV}_{P-P}$, SA = 1	—	—	10	mV _{P-P}
Leak Output	e_o	$e_{in} = 250\text{mV}_{P-P}$, SA = 3	—	—	10	mV _{P-P}
Overload Output	e_o	$e_{in} = 250\text{mV}_{P-P}$, SA = 1, $S\beta = \text{ON}$	350	—	650	mV _{P-P}
UNI-Color Ratio	G_v	$e_{in} = 30\text{mV}_{P-P}$, SA = 2, $V_{10-11} = 0\text{V}$, $e_o (V_{R1}\text{MAX})/e_o (V_{R1}\text{MIN})$	7.0	9.5	12.0	dB
Pull-In Range	$ f_P $	$e_{in} = 250\text{mV}_{P-P}$	300	—	—	Hz
Hold-In Range	$ f_K $	$e_{in} = 250\text{mV}_{P-P}$	500	—	—	Hz
VCO Sensitivity	β	$\Delta f/\Delta V_{2-3}$	2	—	—	kHz/V
OSC Output	V_{OSC}	$f = 3.57945\text{MHz}$, $e_{in} = 0\text{V}_{P-P}$	0.5	1.0	—	V _{P-P}
Pin1 Input Impedance	R_1		—	2	—	k Ω
	C_1		—	0.5	—	pF
Pin7 Input Impedance	R_7		—	1	—	k Ω
	C_7		—	6	—	pF

Pin Connection Diagram

