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## 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, $R_L$ .....	$3.3k\Omega$
Power Dissipation, $P_D$ .....	920mW

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>Static Characteristics</b>						
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	$V_9$	$I = -10\mu A$	-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 <sub>P-P</sub>
ACC Output		$e_{in} = 250\text{mV}_{P-P}$ , SA = 2, $V_{R1}$ MAX	–	1.35	–	mV <sub>P-P</sub>
Killer Output	$e_o$	$e_{in} = 5\text{mV}_{P-P}$ , SA = 1	–	–	10	mV <sub>P-P</sub>
Leak Output	$e_o$	$e_{in} = 250\text{mV}_{P-P}$ , SA = 3	–	–	10	mV <sub>P-P</sub>
Overload Output	$e_o$	$e_{in} = 250\text{mV}_{P-P}$ , SA = 1, $S\beta = \text{ON}$	350	–	650	mV <sub>P-P</sub>
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	$\beta$	$\Delta f/\Delta V_{2-3}$	2	–	–	kHz/V
OSC Output	$V_{OSC}$	$f = 3.57945\text{MHz}$ , $e_{in} = 0\text{V}_{P-P}$	0.5	1.0	–	V <sub>P-P</sub>
Pin1 Input Impedance	$R_1$		–	2	–	k $\Omega$
	$C_1$		–	0.5		pF
Pin7 Input Impedance	$R_7$		–	1	–	k $\Omega$
	$C_7$		–	6	–	pF

**Pin Connection Diagram**

