



ELECTRONICS, INC.
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NTE1412 Integrated Circuit Recording Video Signal Processor

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

Supply Voltage (V_{17-7}), V_{CC}	14.4V
Circuit Voltage, V_{20-7}	14.4V
Power Dissipation, P_D	630mW
Operating Temperature Range, T_{opr}	-20°C to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40 to $+150^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = +12\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{tot}		30	–	50	mA
AGC Output Amplitude	V_{24}	Video Signal $0.5V_{P-P}$	0.45	–	0.95	V_{P-P}
AGC Control Sensitivity	ΔV_{24}	0.25 to $1V_{P-P}$	–	–	2	dB
Sync Separation Input Sensitivity	S_5		0.4	–	–	V_{P-P}
Sync Separation Output Amplitude	V_6		5.7	–	6.7	V_{OP}
Color Amplifier Gain	G_{21-22}	$f = 1\text{MHz}$, $0.3V_{P-P}$	6.5	–	9.5	dB
Color/BW Switch Sensitivity	S_{23}		4	–	–	V
Video Amplifier Gain	G_{19-18}	$f = 1\text{MHz}$, $0.3V_{P-P}$	10.5	–	13.5	dB
FM Modulator						
OSC Frequency	f_{09}	$C = 100\text{pF}$, $R = 2.2\text{k}\Omega$	3.3	–	4.1	MHz
OSC Output 2 nd Harmonics	D_{2f}		–	–	–40	dB
Output Amplitude	V_9		1.1	–	1.6	V_{P-P}
Frequency Control Sensitivity	β_9		1.7	–	2.2	MHz/V

Note 1. Limited Availability: Not recommended for new design.

Pin Connection Diagram

