

NTE1264 Integrated Circuit Video AGC Circuit for VCR

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

Supply Voltage (V_{12-4}), V_{CC}	15.6V
Supply Current, I_{CC}	45mA
Power Dissipation, P_D	490mW
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = V_{12-4} = 12\text{V}$, $T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{tot}		15	25	38	mA
Video Signal Input Voltage	V_{11}		2	3	4	V
AGC Output Amplitude	$A_{AGC(7)}$	$V_i = 0.5V_{P-P}$	1.0	1.3	1.8	V_{P-P}
AGC Control Sensitivity	$\beta_{AGC(7)}$	$f = 10\text{kHz}$, -10 to $+5\text{dB}$, $V_{11} = 0.5V_{P-P}$ (0dB)	—	0.5	1.0	dB
AGC Circuit Gain	$G_{AGC(7)}$	$f = 10\text{kHz}$, $V_i = 0.1V_{P-P}$	—	22	—	dB
AGC Signal-to-Noise Ratio	$S/N_{AGC(7)}$	Video Signal $0.15V_{P-P}$	45	50	—	dB
AGC Frequency Characteristics	$G_{f(7)}$	$f_1 = 1\text{MHz}$, $f_2 = 5\text{MHz}$, $V_i = 0.1V_{P-P}$	—	0.5	—	dB
Emphasis Gain	G_{EH}	$f_1 = 10\text{kHz}$, $f_2 = 2\text{MHz}$, $V_i = 0.3V_{P-P}$	7.1	8.0	8.5	dB
Emphasis LF Gain	G_{EL}	$f = 10\text{kHz}$, $V_i = 0.3V_{P-P}$	8	10	12	dB
AGC Distortion	D_{AGC}	$f = 10\text{kHz}$, $V_i = 0.5V_{P-P}$	—	0.5	1.5	%

Pin Connection Diagram

