ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

# NTE1264
# Integrated Circuit
# Video AGC Circuit for VCR

**Absolute Maximum Ratings:** ($T_A$ = +25°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°C
Storage Temperatue Range, $T_{stg}$ . . . . . –40° to +150°C

**Electrical Characteristics:** ($V_{CC}$ = $V_{12–4}$ = 12V, $T_A$ = +25°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 | $A_{AGC(7)}$ | $V_i$ = 0.5$V_{P–P}$ | 1.0 | 1.3 | 1.8 | $V_{P–P}$ |
| AGC Control Sensitivity | $\beta_{AGC(7)}$ | f = 10kHz, –10 to +5dB, $V_{11}$ = 0.5$V_{P–P}$ (0dB) | – | 0.5 | 1.0 | dB |
| AGC Circuit Gain | $G_{AGC(7)}$ | f = 10kHz, $V_i$ = 0.1$V_{P–P}$ | – | 22 | – | dB |
| AGC Signal–to–Noise Ratio | $S/N_{AGC(7)}$ | Video Signal 0.15$V_{P–P}$ | 45 | 50 | – | dB |
| AGC Frequency Chracteristics | $Gf_{(7)}$ | $f_1$ = 1MHz, $f_2$ = 5MHz, $V_i$ = 0.1$V_{P–P}$ | – | 0.5 | – | dB |
| Emphasis Gain | $G_{EH}$ | $f_1$ = 10kHz, $f_2$ = 2MHz, $V_i$ = 0.3$V_{P–P}$ | 7.1 | 8.0 | 8.5 | dB |
| Emphasis LF Gain | $G_{EL}$ | f = 10kHz, $V_i$ = 0.3$V_{P–P}$ | 8 | 10 | 12 | dB |
| AGC Distortion | $D_{AGC}$ | f = 10kHz, $V_i$ = 0.5$V_{P–P}$ | – | 0.5 | 1.5 | % |

**Pin Connection Diagram**