



44 FARRAND STREET
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NTE1080 Integrated Circuit TV Video Processor

Features:

- For Reverse AGC
- Sufficient Gain and Quieting Sensitivity
- Stable Gain Over the Wide Band
- Small Wave Distortion with AGC

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

Maximum Voltage

| | |
|---------------------|--------------|
| V_{11} | 18V |
| V_7, V_8 | 18V |
| V_1, V_2 | $10V_{P-P}$ |
| V_6, V_{10} | 6V |
| V_5 | -20V to +10V |

Allowable Power Dissipation ($T_A \leq +65^\circ\text{C}$), $P_D\text{max}$ 500mW

Operating Temperature Range, T_{opr} -20° to +85°C

Storage Temperature Range, T_{stg} -55° to +125°C

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{11} = 12V$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------|--------------|---------------------------------------|-----|------|-----|--------------------------|
| AGC Range | | $f = 58\text{MHz}$, 5V to 7V | 60 | — | — | dB |
| Power Gain | PG | $f = 58\text{MHz}$ | 44 | 50 | 55 | dB |
| Noise Figure | NF | $R_S = 50\Omega$, $f = 58\text{MHz}$ | — | 7.0 | — | dB |
| Maximum Output Voltage | v_o | AGC, 0 to -30dB | 200 | — | — | mV_{rms} |
| RF AGC Voltage Range | | Max V_{12} | — | 8.2 | — | V |
| | | Min V_{12} | — | -6.0 | — | V |
| Output Voltage Drift | Δv_o | IF Attenuation = 60dB | — | 0.3 | — | dB |
| IF Gain Drift | ΔPG | Within RF AGC Operation | — | 10 | 17 | dB |
| RF AGC Delay | V_{13} | IF Attenuation = 30dB | 6.0 | 7.0 | 8.0 | V |
| Output Stage Current | I_o | $I_7 + I_8$ | — | 8.5 | — | mA |
| Total Dissipation Current | I_{CC} | $I_7 + I_8 + I_{11}$ | — | 28 | 33 | mA |
| Total Power Dissipation | P_D | | — | 336 | 396 | mW |

Pin Connection Diagram

