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# NTE7120
# Integrated Circuit
# 3 Channel Video Amp for
# High Resolution Color TV

**Description:**

The NTE7120 is a semiconductor integrated circuit in a 30–Lead DIP type package that has a built–in 3–channel amplifier with 50MHz band. Every channel is provided with a broad–band amplifier, main/sub contrast control, main/sub luminance (brightness) control, peaking, blanking, and peak limiter functions. Accordingly, this device is designed for use in high–resolution color display monitors.

**Features:**

- The employment of a new bi–polar wafer process makes it possible to reduce power dissipation, and 3 channels can be incorporated in this amplifier ($V_{CC}$ = 12V, $I_{CC}$ = 77mA)
- Input: $1V_{P–P}$ (Typical)
  Output: $V_{P–P}$ (Maximum)
  Frequency Band: 50MHz
- Main and sub contrast and luminance controls are provided; the main control can change contrast and luminance at the same time for 3 channels, and the sub control can change them independently for each channel.
- The DC feedback circuit built in the IC can produce a stable DC level at the IC output pins.

**Applications:**

- CRT Display

**Absolute Maximum Ratings:**

Supply Voltage, $V_{CC}$ . . . . . 14V
Power Dissipation, $P_D$ . . . . . 1670mW
Operating Temperature Range, $T_{opr}$ . . . . . –20° to +65°C
Storage Temperature Range, $T_{stg}$ . . . . . –40° to +125°C

**Recommended Operating Conditions:**

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Supply Voltage Range | $V_{CC}$ | | 11.0 | – | 12.5 | V |
| Rated Supply Voltage | $V_{CC}$ | | 0 | 12 | – | V |

**Pin Connection Diagram**