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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 $+65^{\circ}C$
 Storage Temperature Range, T_{stg} -40° to $+125^{\circ}C$

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

N.C.	1	30	White Peak
V _{CC} (R)	2	29	R Out
R In	3	28	R Hold
R Sub Contrast	4	27	R Sub BRT
R Peaking	5	26	GND (R)
V _{CC}	6	25	G Out
G In	7	24	G Hold
G Sub Contrast	8	23	G Sub BRT
G Peaking	9	22	GND (G)
V _{CC} (B)	10	21	B Out
B In	11	20	B Hold
B Sub Contrast	12	19	B Sub Bright
B Peaking	13	18	GND (B)
Contrast	14	17	Blanking Pulse
Clamp Pulse	15	16	Brightness

