

HA11465A

T-74-07-01

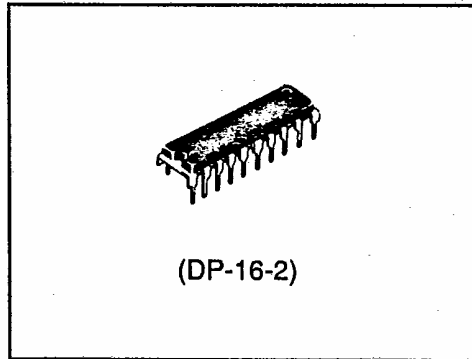
TV Video Amplifier

Functions

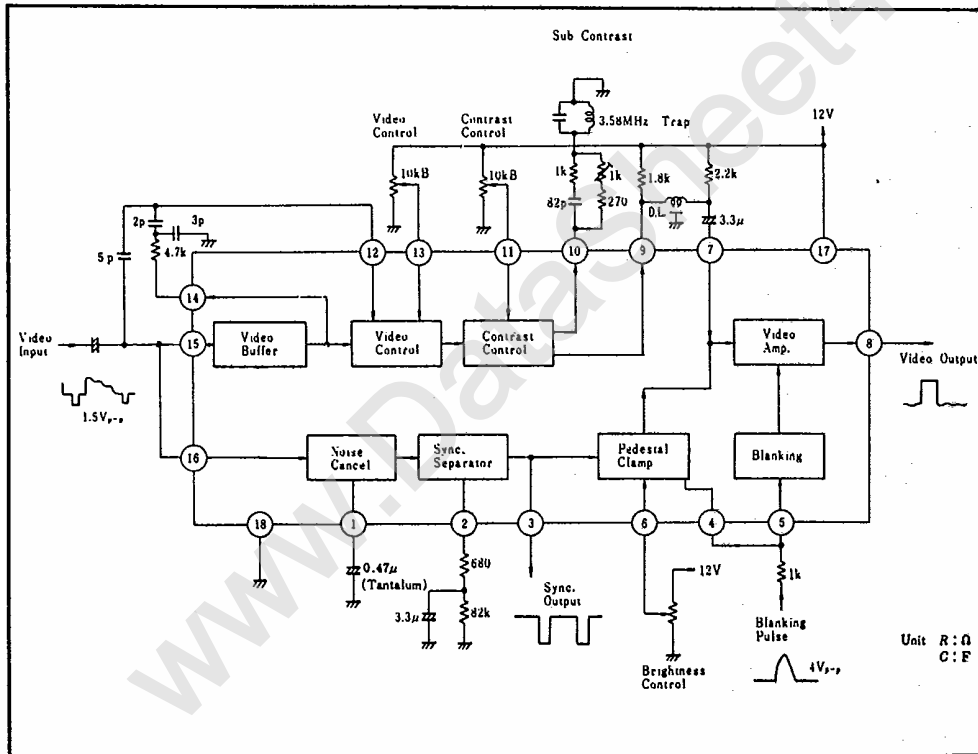
- Video buffer
- Video tone control
- Contrast control
- Sync separator
- Noise canceller
- Pedestal clamp
- Blanking

Features

- DC contrast and video tone control
- Video processing functions provided
- AC coupling of video input
- Low external parts count
- Excellent sync separator
- High performance video tone control using only L, C, and R



Block Diagram and Typical Operating Circuit



Absolute Maximum Ratings (Ta = 25°C)

| Item | Symbol | Rating | Unit |
|-------------------------------|------------------|-------------|------|
| Supply Voltage | V _{CC} | 15 | V |
| Power Dissipation (Ta = 75°C) | P _T | 500 | mW |
| Operating Temperature | T _{opr} | -20 to +75 | °C |
| Storage Temperature | T _{stg} | -55 to +125 | °C |

Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Conditions |
|-------------------|--------------------|------|------|------|------|--|
| Supply Current | I ₁₇ | 15.4 | 18.9 | 26.3 | mA | V _{CC} = 12V |
| Pin 15 Voltage | V ₁₅ | 3.30 | 3.55 | 3.80 | V | |
| Pin 14 Voltage | V ₁₄ | 6.50 | 7.00 | 7.50 | V | |
| Pin 13 Voltage | V ₁₃ | 4.51 | 4.86 | 5.21 | V | |
| Pin 11 Voltage | V ₁₁ | 5.62 | 5.92 | 6.22 | V | |
| Pin 10 Voltage | V ₁₀ | 1.75 | 2.50 | 3.25 | V | |
| Pin 8 Voltage | V ₈ | 11.0 | 11.3 | — | V | Blanking period |
| Chroma Amp Gain | G ₁₅₋₁₄ | 1.8 | 2.0 | 2.2 | | V ₁₅ = 0.4 V _{p-p} , f = 500 kHz |
| Contrast Amp Gain | G ₁₅₋₁₀ | — | 1.03 | — | | V ₁₅ = 2.0 V _{p-p} , f = 500 kHz, V ₄ = 12 |
| Contrast Amp Gain | G ₁₅₋₁₀ | — | 0.27 | — | | V ₁₅ = 2.0 V _{p-p} , V ₄ = 0 V |
| Video Amp Gain | G ₇₋₈ | — | 2.6 | — | | V ₁₅ = 1.5 V _{p-p} , f = 500 kHz |

Ordering Information

| Type No. | Package |
|----------|---------|
| HA11465A | DP-16-2 |



Typical Performance Curves

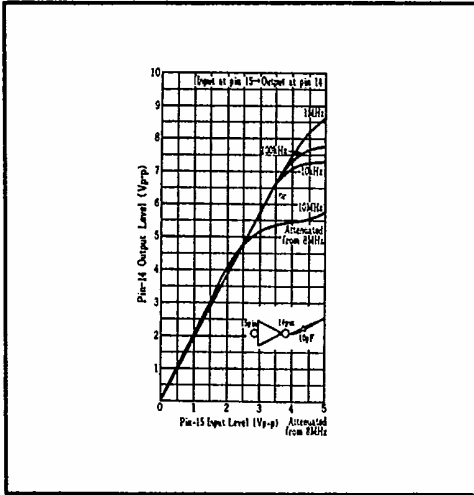


Figure 1 Chroma Amp Input-Output Characteristics

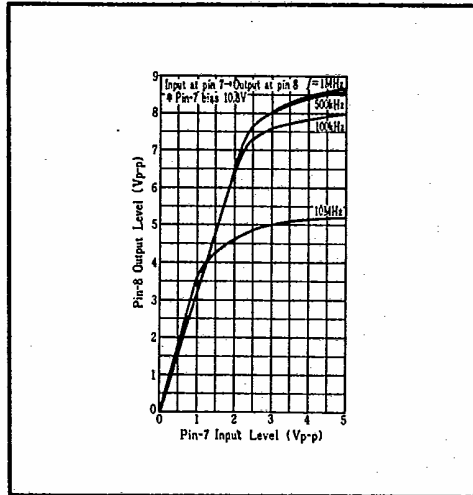


Figure 2 Video Amp Input-Output Characteristics

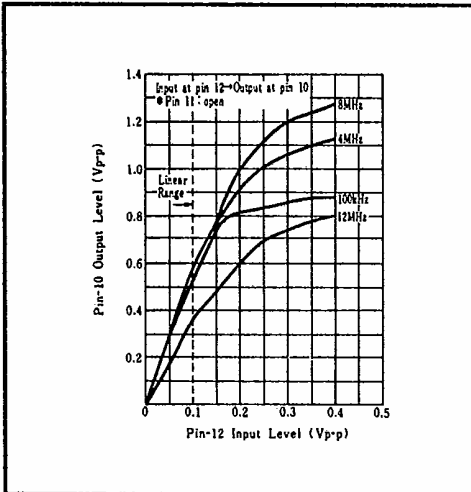


Figure 3 Tone Amp Input-Output Characteristics

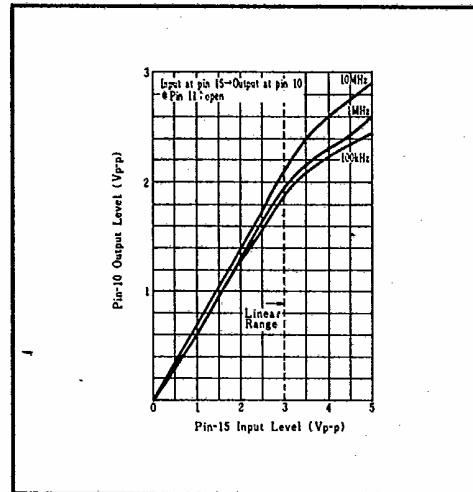


Figure 4 Contrast Amp Input-Output Characteristics



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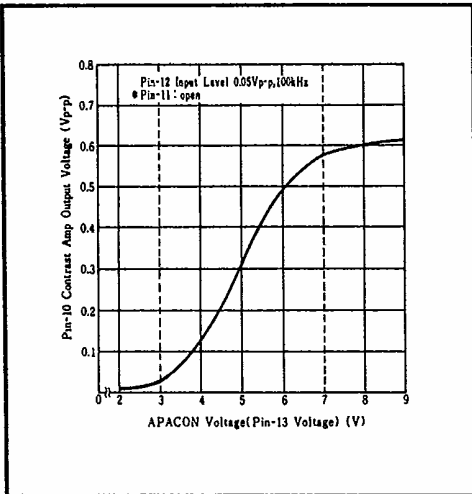


Figure 5 Aperture Control Characteristic

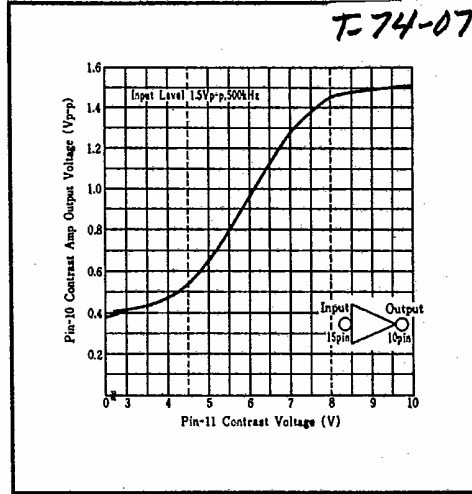


Figure 6 Contrast Control Characteristic



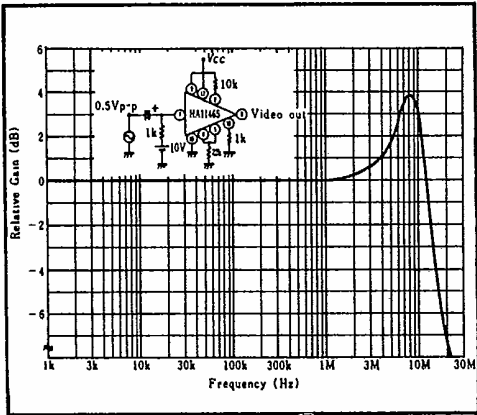


Figure 7 Video Amp Frequency Characteristic

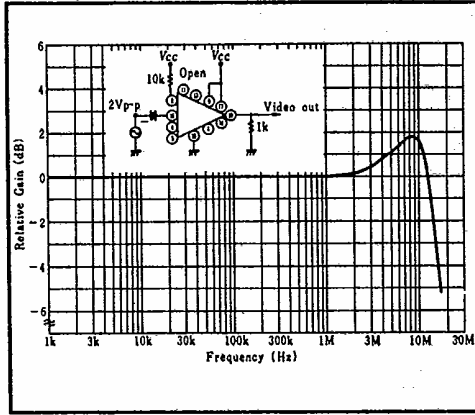


Figure 8 Contrast Amp Frequency Characteristic

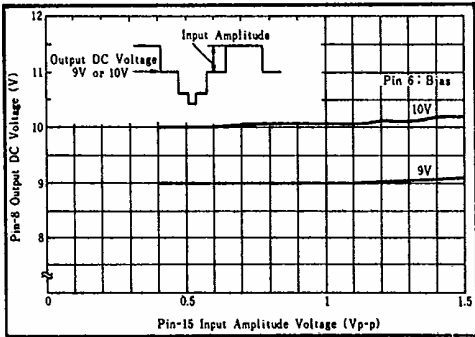


Figure 9 Pedestal Clamp Characteristics

