

# HA11732

T-77-17

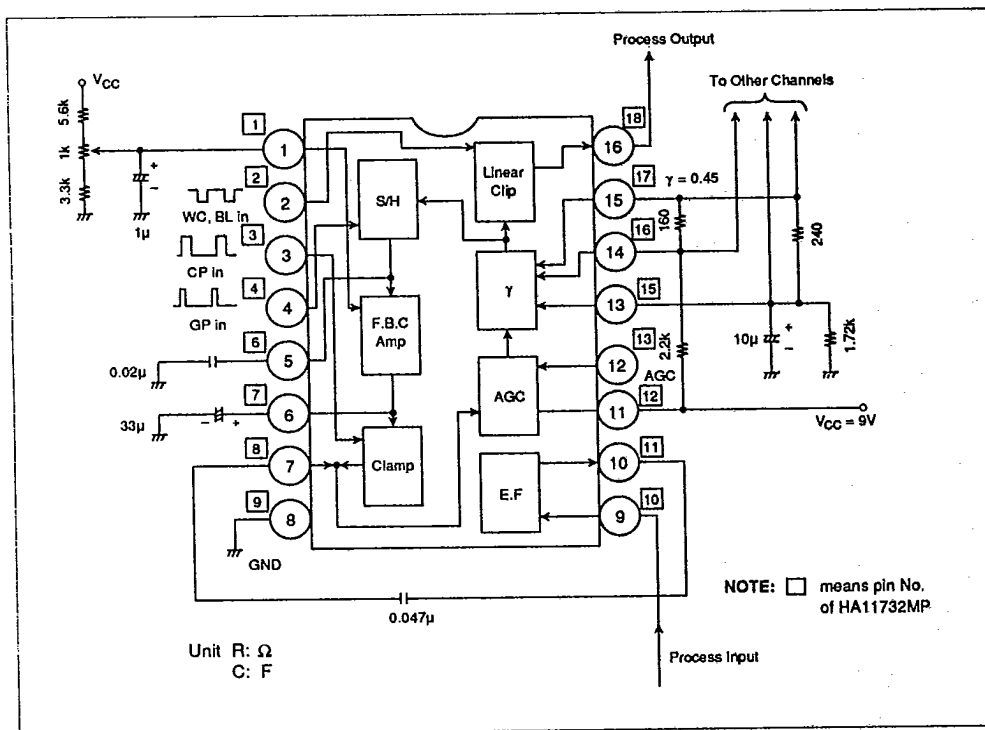
## Processor for Video Cameras

HA11732 provides  $\gamma$  correction for the video signal amplified by the preamp, blanking, white clip and black clip.

### Features

- Applicable in a wide range of systems, including frequency separation type cameras
- Feedback clamp circuitry ensures stable black levels
- $\gamma$  can be adjusted within the range of 0.45 to 1.0 by changing terminal voltage
- High pulse input terminal impedance for superior driving

### Block Diagram



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## Absolute Maximum Ratings

| Item                  | Symbol                          | Rating               | Unit |
|-----------------------|---------------------------------|----------------------|------|
| Supply Voltage        | $V_{CC}$                        | 12                   | V    |
| Input Voltage         | Pins 1, 2, 3, 4, 12<br>$V_{IN}$ | -0.3 to $V_{CC}+0.3$ | V    |
|                       | Pins 13, 14, 15                 | -0.3 to +7           |      |
| Power Dissipation*    | $P_T$                           | 550                  | mW   |
| Operating Temperature | $T_{opr}$                       | -20 to +80           | °C   |
| Storage Temperature   | $T_{stg}$                       | -40 to +125          | °C   |

\* Value at  $T_a = 70^\circ\text{C}$ Electrical Characteristics ( $V_{CC} = 9\text{V}$ ,  $T_a = 25^\circ\text{C}$ )

| Item                          | Symbol           | Min  | Typ  | Max       | Unit     | Test Conditions                                              |
|-------------------------------|------------------|------|------|-----------|----------|--------------------------------------------------------------|
| Supply Current                | $I_{CC}$         | 10.7 | 15.4 | 22.4      | mA       | $V_{CC} = 9\text{V}$                                         |
| Voltage Gain                  | $G_V$            | 4.5  | 6    | 7.5       | dB       | $\gamma = 1$ , $V_{AGC} = V_{CC}$ , for rated output voltage |
| AGC Variable Range            | $\Delta G_{AGC}$ | 6    | 7    | 8         | dB       | $\gamma = 1$ , $V_{AGC} = 0\text{V}$ & $V_{CC}$              |
| $\gamma$ Deviation            | $\Delta\gamma$   | —    | —    | $\pm 1.5$ | %        | $\gamma = 0.45$                                              |
| DC Output Voltage             | $E_O(\text{DC})$ | 3.35 | 3.5  | 3.65      | V        | $V_2 = 0\text{V}$ , $V_{13} = 3.5\text{V}$                   |
| Output Impedance              | $Z_O$            | —    | 150  | 320       | $\Omega$ |                                                              |
| FBC Amplifier Gain            | $G_{V3}$         | 23   | 28   | 32        | dB       |                                                              |
| $\gamma$ Value Variable Range | $\gamma$         | 0.45 | —    | 1         |          |                                                              |

## Ordering Information

| Type No.  | Package |
|-----------|---------|
| HA11732   | DP-16   |
| HA11732MP | MP-18   |

