

# HA11401

## TV Video Amplifier

### FUNCTIONS

- Video Buffer
- Video Tone Control
- Contrast Control
- Sync. Separator
- Noise Canceller
- Pedestal Clamp
- Blanking

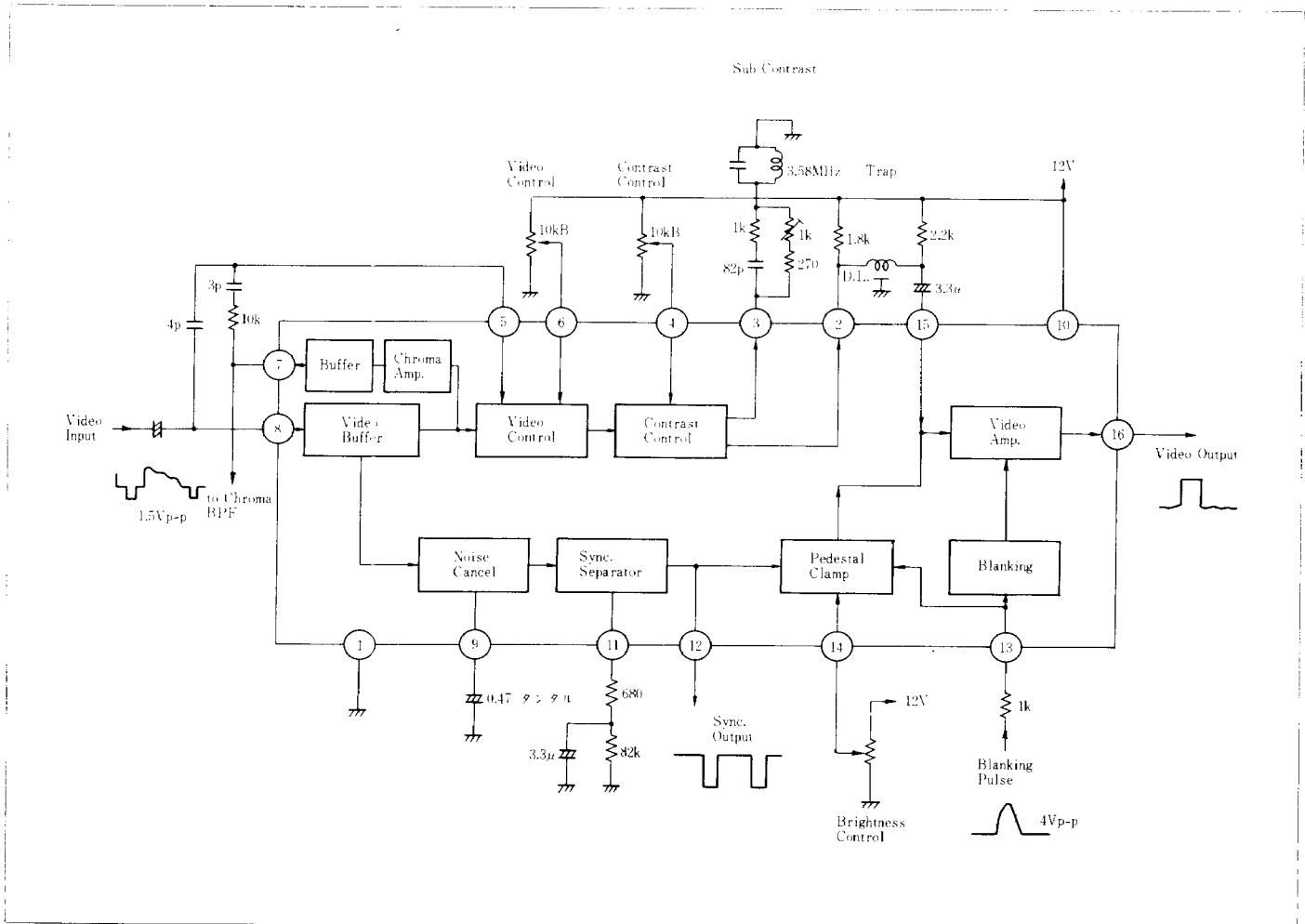
### FEATURES

- DC contrast and video tone control
- All functions needed for video processing are provided.
- AC coupling of video input
- Less number of external components
- Excellent sync separator
- High performance of video tone control using only L, C and R.



(DP-16)

### BLOCK DIAGRAM & TYPICAL OPERATING CIRCUIT



■ ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$  unless otherwise specified)

Item	Symbol	Rating	Unit
Supply Voltage	$V_{CC}$	15	V
Power Dissipation	$P_T$	500*	mW
Operating Temperature Range	$T_{opr}$	-20 to +75	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +125	$^\circ\text{C}$

\* Value at  $T_a=75^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$  unless otherwise specified)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Supply Current	$I_{10}$	$V_{CC}=12\text{V}$	15.4	18.9	26.3	mA
Pin 8 Voltage	$V_8$		3.30	3.55	3.80	V
Pin 7 Voltage	$V_7$		6.50	7.00	7.50	V
Pin 6 Voltage	$V_6$		4.51	4.86	5.21	V
Pin 4 Voltage	$V_4$		5.62	5.92	6.22	V
Pin 3 Voltage	$V_3$		1.75	2.50	3.25	V
Pin 16 Voltage	$V_{16}$	Blanking period	11.0	11.3	—	V
Chroma Amp. Gain	$G_{8-7}$	$v_8=0.4\text{V}_{p-p}$ , $f=500\text{kHz}$	1.8	2.0	2.2	
Contrast Amp. Gain (1)	$G_{8-3}$	$v_8=2.0\text{V}_{p-p}$	—	1.03	—	
		$f=500\text{kHz}$ , $V_4=12\text{V}$ $V_4=0\text{V}$	—	0.27	—	
Video Amp. Gain	$G_{15-16}$	$v_{15}=1.5\text{V}_{p-p}$ , $f=500\text{kHz}$	—	2.6	—	