

HA11401

TV Video Amplifier

FUNCTIONS

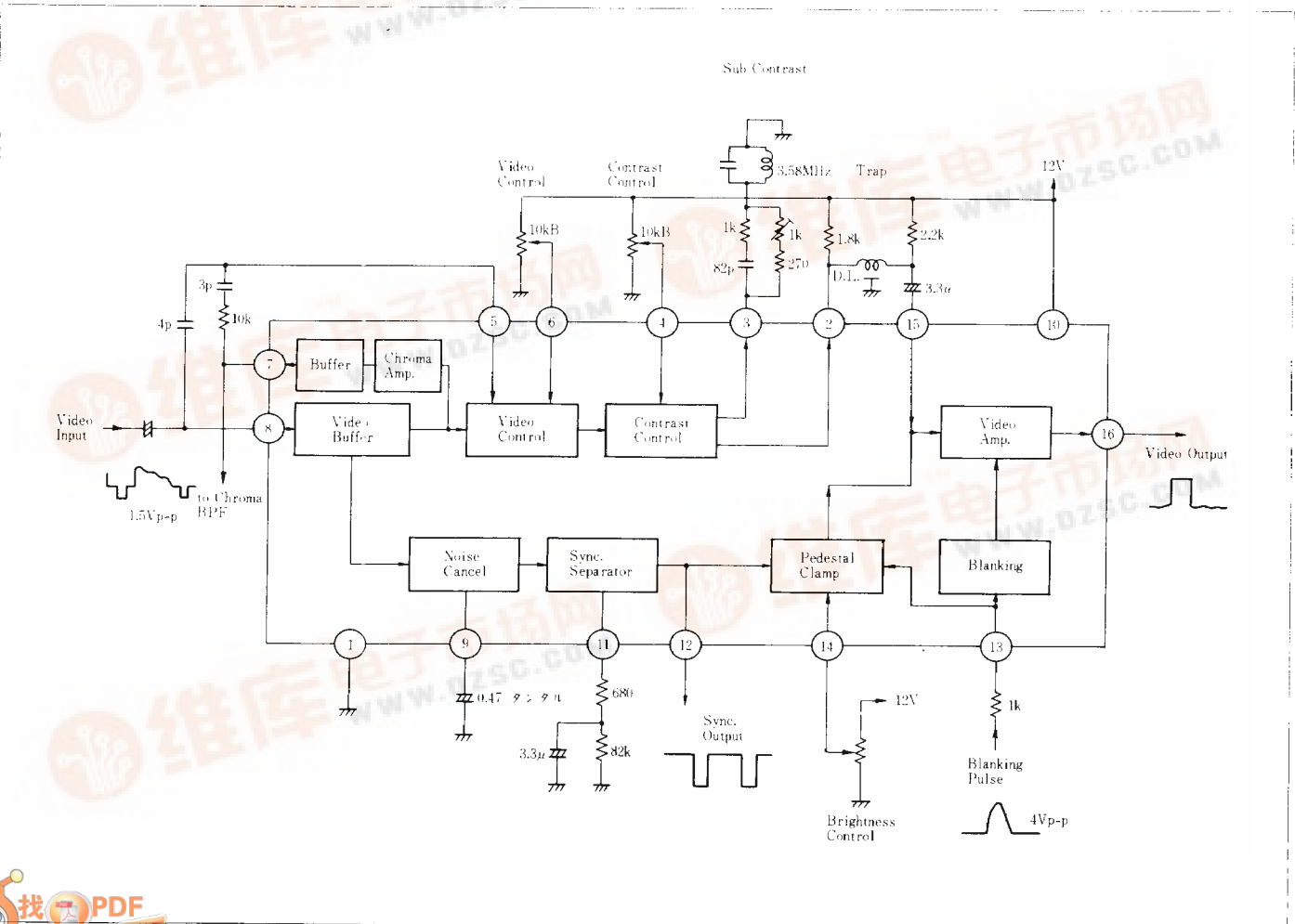
- Video Buffer
- Video Tone Control
- Contrast Control
- Sync. Separator
- Noise Canceller
- Pedestal Clamp
- Blanking

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.



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}	$v_s=0.4\text{V}_{p-p}$, $f=500\text{kHz}$	1.8	2.0	2.2	
Contrast Amp. Gain (1)	G_{8-3}	$v_s=2.0\text{V}_{p-p}$	$f=500\text{kHz}$, $V_4=12\text{V}$	—	1.03	—
			$V_4=0\text{V}$	—	0.27	—
Video Amp. Gain	G_{15-16}	$v_{15}=1.5\text{V}_{p-p}$, $f=500\text{kHz}$	—	2.6	—	