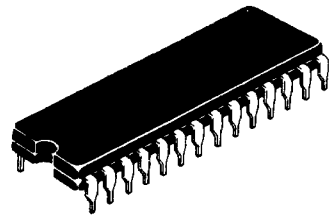
HA11436

Color TV Luminance-Chroma System with Auto. Flesh

■ FUNCTIONS

- Auto Flesh Control
- Over Load Detector
- Chroma Amp (Peak Detection Type ACC)
- Color Sync (APC)
- Color Demoduration (Color Difference Output)
- Sharpness Emitter Peaking
- Contrast Control
- Pedestal Clamp
- Brightness Control
- Blanking
- Video Output Circuit for VIR Detector
- Over Saturation Preventer

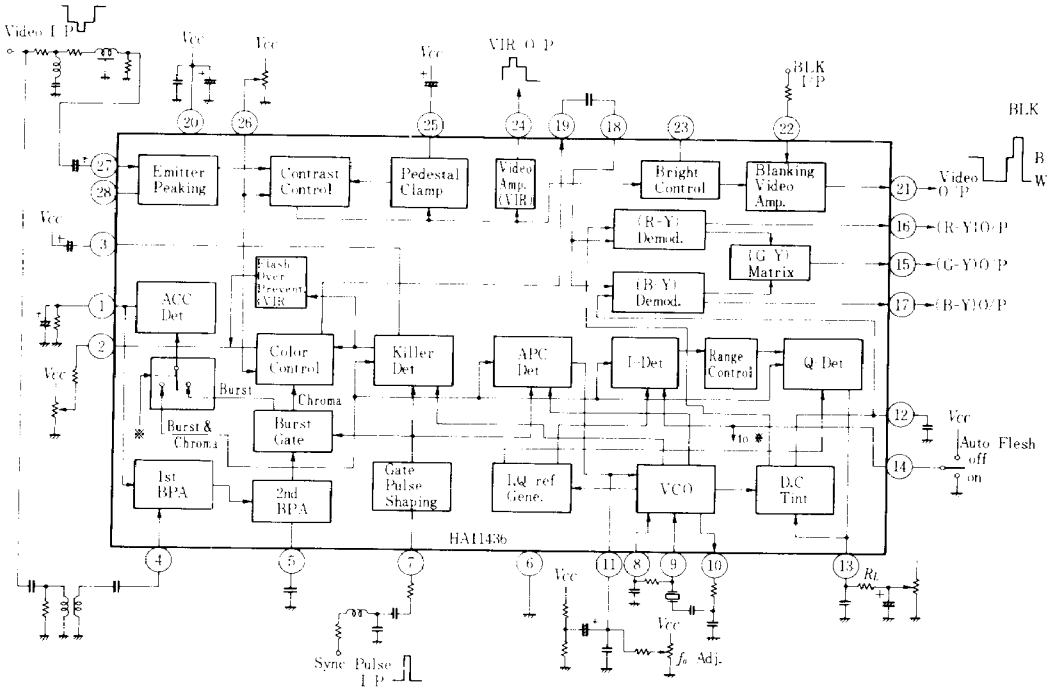


(DP-28)

■ FEATURES

- All functions of luminance and chroma for U.S. field
- Low cost and excellent characteristics for VTR monitors
- Combination with the HA11409 (for VIR) OK
- Demodulation phase adjustable by one external capacitor (90° demod., without the capacitor)
- VCO's output frequency adjustable by a variable resistor
- Voltage gain of auto flesh control adjustable externally.
- High Range Tint Control 120 deg. typ.

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (Unless otherwise specified, $Ta = 25°C$)

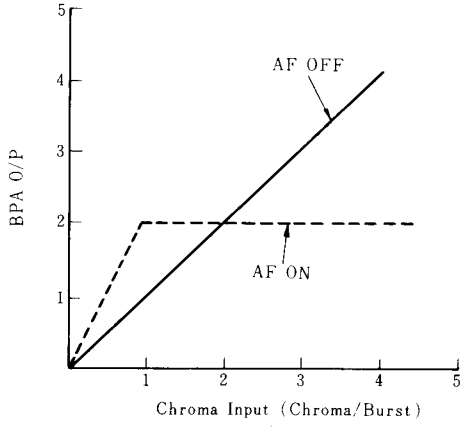
Item	Symbol	Rating	Unit
Supply Voltage	Vcc	15	V
Power Dissipation ($Ta = 65°C$)	P_T (max)	850	mW
Operating Temperature Range	T_{opr}	−20 to +65	°C
Storage Temperature Range	T_{stg}	−55 to +125	°C

■ ELECTRICAL CHARACTERISTICS

Item	Symbol	min.	typ.	max.	Unit	Note No.
Max Chroma O/P	E_C max.	0.55	0.67	0.85	V_{P-P}	Note 1
ACC Range	E_a	0.38	0.55	0.74	V_{P-P}	Note 2
Killer Sensitivity	E_k	—	−44	—	dB	
Conversion Gain	G_{R-Y}	4.5	6.2	—		
Matrix Ratio (1)	E_{B-Y}/E_{R-Y}	—	0.8	—		
Matrix Ratio (2)	E_{G-Y}/E_{R-Y}	—	0.3	—		
Demodulation Phase ∠(R-Y)-∠(B-Y)		—	115	—	deg	Note 3
Demodulation Phase ∠(G-Y)-∠(B-Y)		—	245	—	deg	
DC Output Voltage	E_{ODC}	6.4	7.0	7.6	V	
Difference of DC Output Voltage	ΔE_{ODC}	−0.3	0	+0.3	V	
Video Amp Voltage Gain (1)	G_V	10.5	12	13.5	times	
Video Amp Frequency Response	f_C	—	6.5	—	MHz	
DC Reproduce		—	75	—	%	
Blanked Output Voltage		11	—	—	V	
Video Amp Voltage Gain (2)	G_{VIR}	4.2	5	5.8	times	

Notes : 1. Input Chroma: B/C = 1/1, 100mV$_{P-P}$ = 0dB
2. Input Level: −20dB
3. Adjustable Externally (90° min)

OVER LOAD



AUTO FLESH