

HA11431

—Preliminary

Color TV Luminance-Chroma System

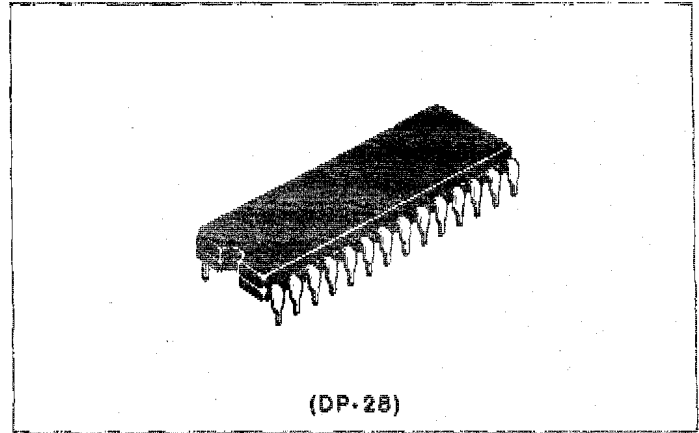
FUNCTIONS

- Secondary Differential Sharpness Control on DC
- Contrast Control
- Pedestal Clamp
- Brightness Control
- Blanking
- Chroma Amp (Peak Detection Type ACC)
- Color Sync (APC)
- Color Demodulation (Color Difference Output)

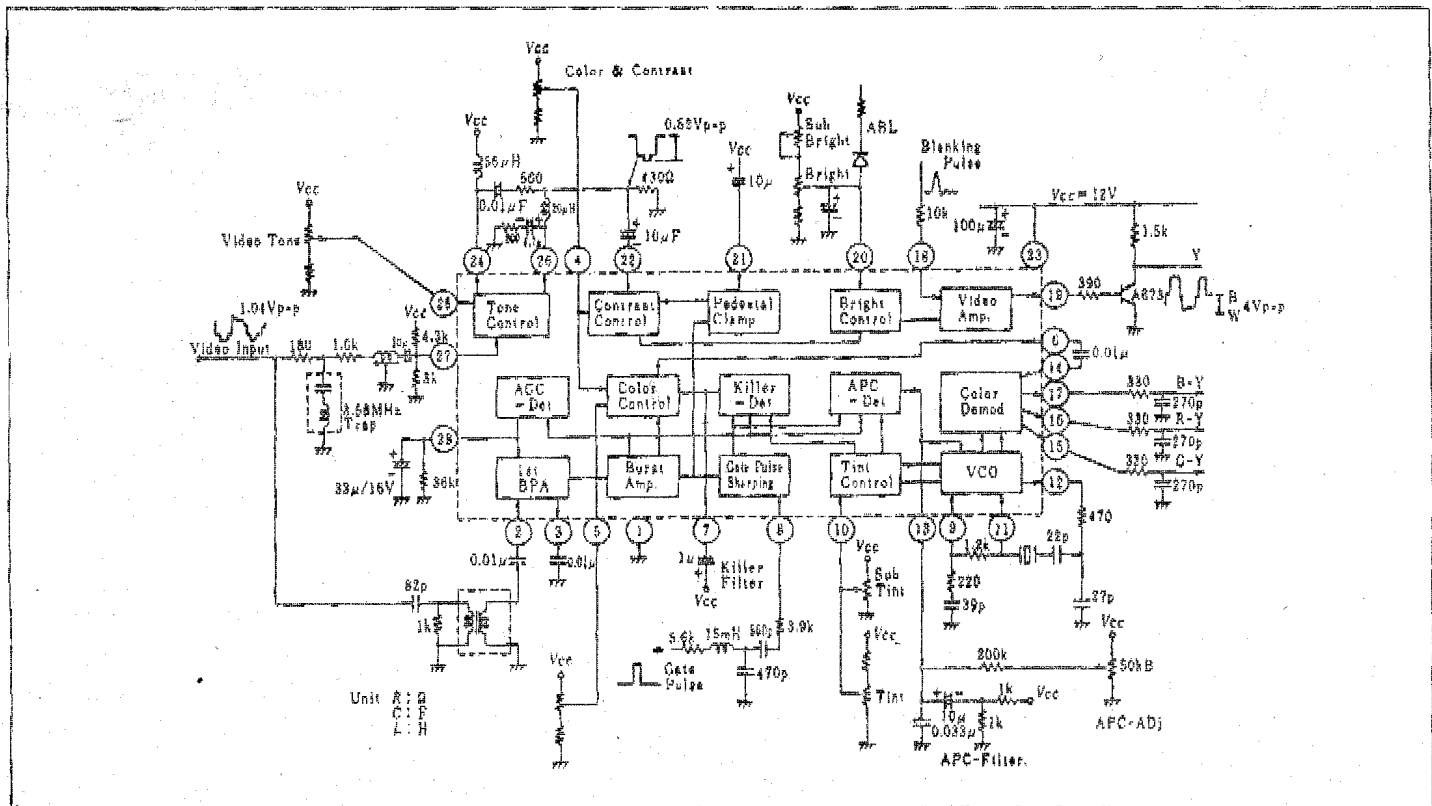
FEATURES

- Secondary Differential Video Tone Control of Current Amplifying Type. Controlled Preshoot and Overshoot Provide Clear Contour Lines. On DC Control
- Internal Blanking Circuit Complete System for Luminance-Chroma Low External Parts Count
- VCO's Output Frequency Adjustable by a Variable Resistor

- Capable to low voltage operation ($V_{CC}=9V$)
- Demodulation on Color Difference Applicable for VIR System High Frequency Response of Video Amp ($f_c=6.5MHz$ typ)



ABC



ABSOLUTE MAXIMUM RATINGS (Unless otherwise specified, $T_a=25^\circ C$)

Item	Symbol	Rating	Unit
Supply Voltage	V_{CC}	15	V
Power Dissipation*	P_{Tmax}	850	mW
Operating Temperature Range	T_{op}	-20 to +65	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to +125	$^\circ C$

* Value at $T_a=65^\circ C$

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ELECTRICAL CHARACTERISTICS ($V_{CC}=12V$, $T_a=25^\circ C$)

Item	Symbol	min.	typ.	max.	Unit	Note
BPA Chroma Max Output Voltage	E_{max}	0.54	0.67	0.85	Vp-p	Burst/Chroma=1
ACC Range	E_s	0.38	0.55	0.74	Vp-p	-20dB Input
Killer Sensitivity	E_k	-	-44	-	dB	
Conversion Gain	G_{R-Y}	4.5	6.2	-		
Matrix Ratio (1)	E_{B-Y}/E_{R-Y}	1.05	1.20	1.35		See Below*
Matrix Ratio (2)	E_{G-Y}/E_{R-Y}	0.30	0.40	0.50		
DC Output Voltage	E_{DCC}	6.4	7.0	7.6	V	
Difference of DC Output Voltage	E_{DCC}	-0.3	0	+0.3	V	
Video Amp Voltage Max Gain	G_V	10.5	12	13.5		
Video Amp Frequency Response	f_c	-	6.5	-	MHz	
DC Reproduce		-	75	-	%	
Blanked Output Voltage		11	-	-	V	

Note * $\angle (R-Y) - \angle (B-Y) = 105^\circ$ typ

Adjustable externally