

# HA11531NT

T-77-07-09

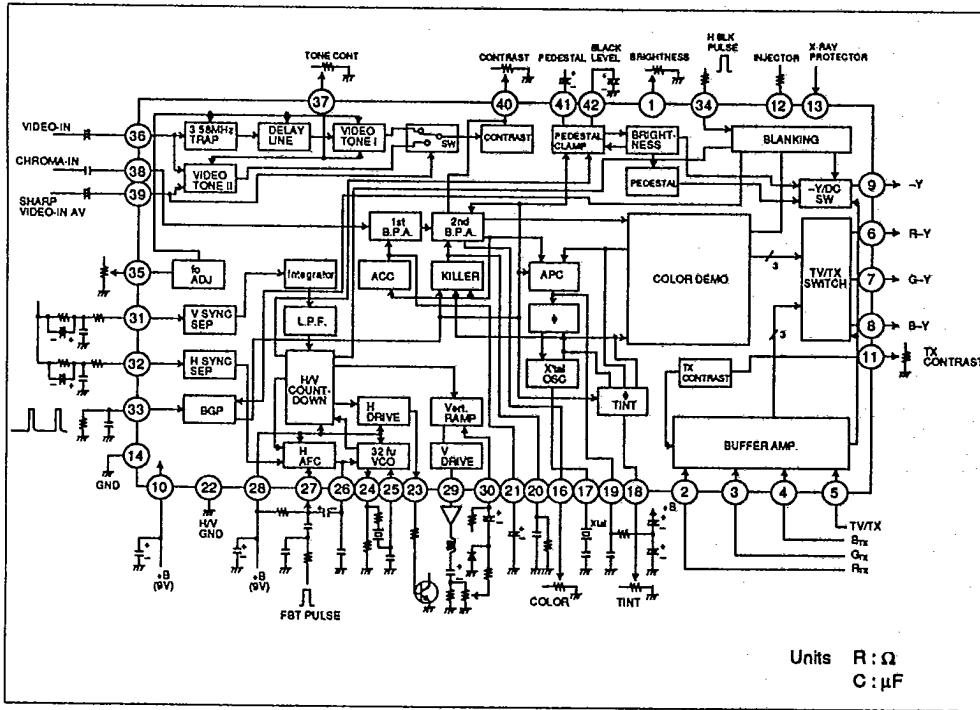
## Video/Chroma Deviation Processor with On-screen Display Function

The HA11531NT features video/chroma and deviation processing, and includes an on-screen display function.

### Features

- Minimal external components
- On-chip filter  
3.5MHz trap, delay line, tone control
- OSD (On-Screen Display) function
- 32f<sub>H</sub> countdown

### Block Diagram



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T-77-07-09

**Absolute Maximum Ratings (Ta = 25°C)**

Item	Symbol	Rating	Unit
Supply Voltage	V <sub>CC</sub>	10	V
Power Dissipation	P <sub>T</sub>	1100	mW
Operating Temperature	T <sub>opr</sub>	- 15 to +65	°C
Storage Temperature	T <sub>stg</sub>	-55 to +125	°C

**Electrical Characteristics (V<sub>CC1</sub> = V<sub>CC2</sub> = 9V, Ta = 25°C)**

Item	Min	Typ	Max	Unit	Test Condition
3.58MHz Trap Gain	—	29	23	dB	-Y output (3.58MHz/100kHz)
Peaking Frequency	1.8	2.0	2.2	MHz	Video Tone Typical
Video Signal Delay Time	—	400	—	ns	
DC Playback Ratio	—	97	—	%	APL 10% to 90%
Killer Sensitivity	—	- 45	—	dB	
Residual Harmonic Level	—	—	0.3	V <sub>p-p</sub>	Color bar input, B-Y output 2V <sub>pp</sub>
Demodulation Angle	93	101	109	deg	∠ (R-Y)/(B-Y)
	228	234	244	deg	∠ (G-Y)/(B-Y)
32f <sub>H</sub> VCO Sensitivity	—	250	—	Hz/μA	
Vertical Blanking Pulse Width	—	19.25	—	H	
Vertical Output Pulse Width	—	10.25	—	H	
Text Signal Output Contrast Ratio	1.75	1.84	1.94		
Text Signal Output Delay Time	Rise	—	20	40	ns
	Fall	—	20	40	ns
Supply Voltage 1, 2	8	9	10	V	
Supply Current	42	73	96.5	mA	

**Ordering Information**

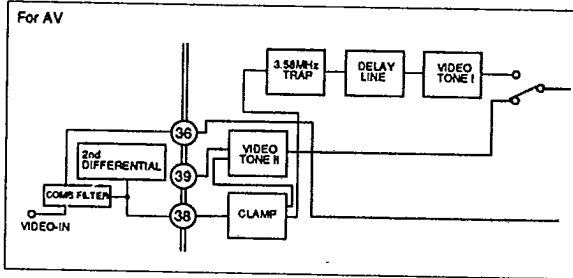
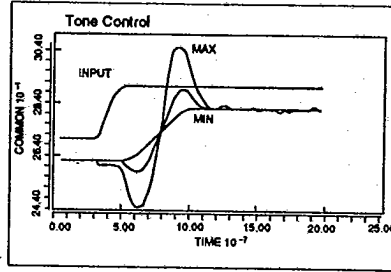
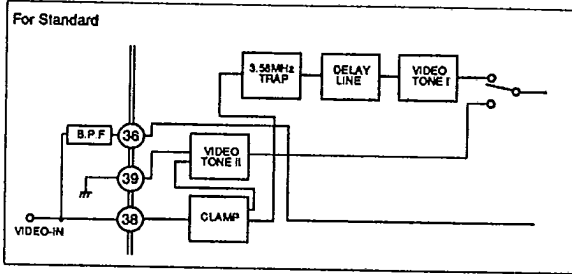
Type No.	Package
HA11531NT	DP-42S



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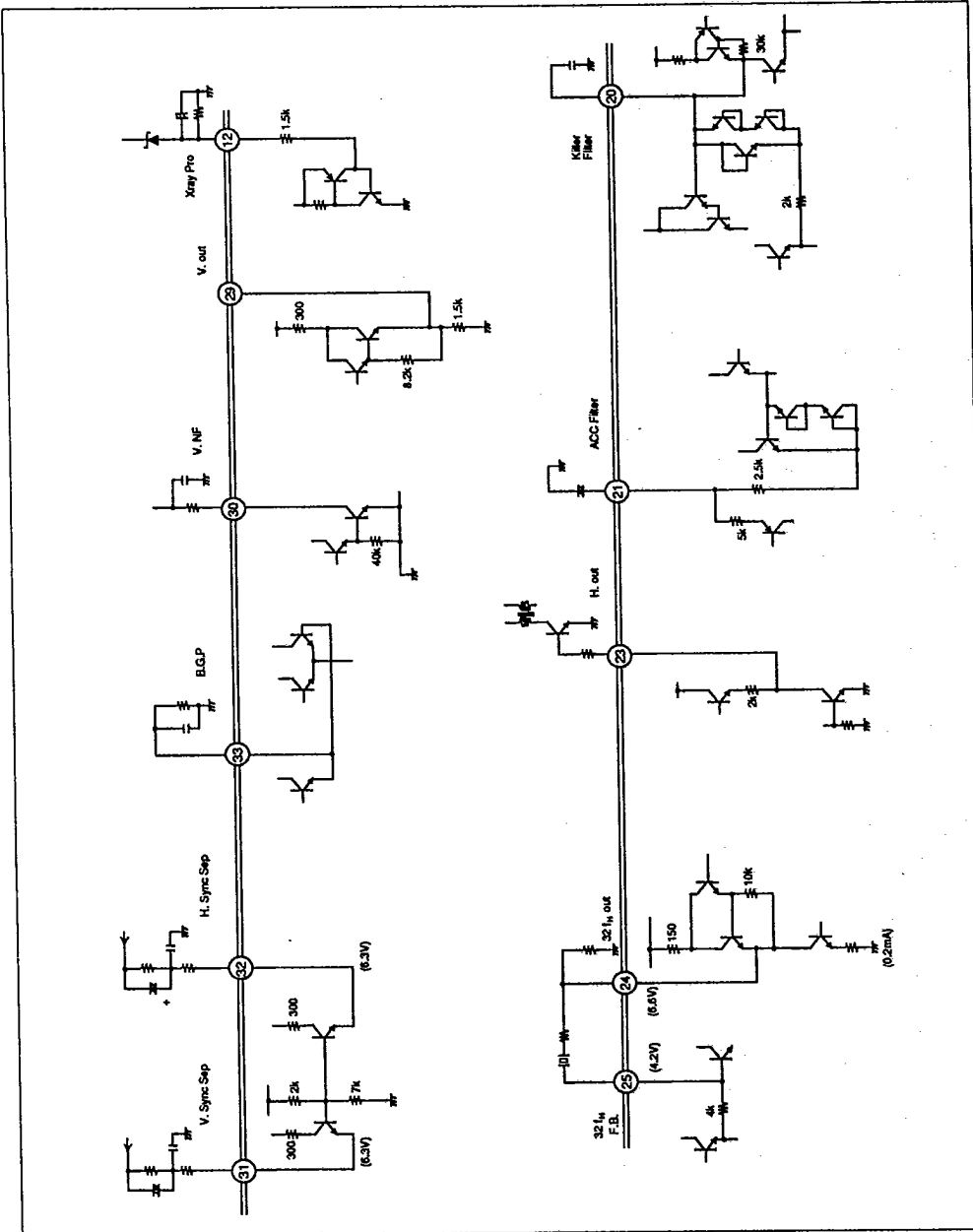
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T-77-07-09



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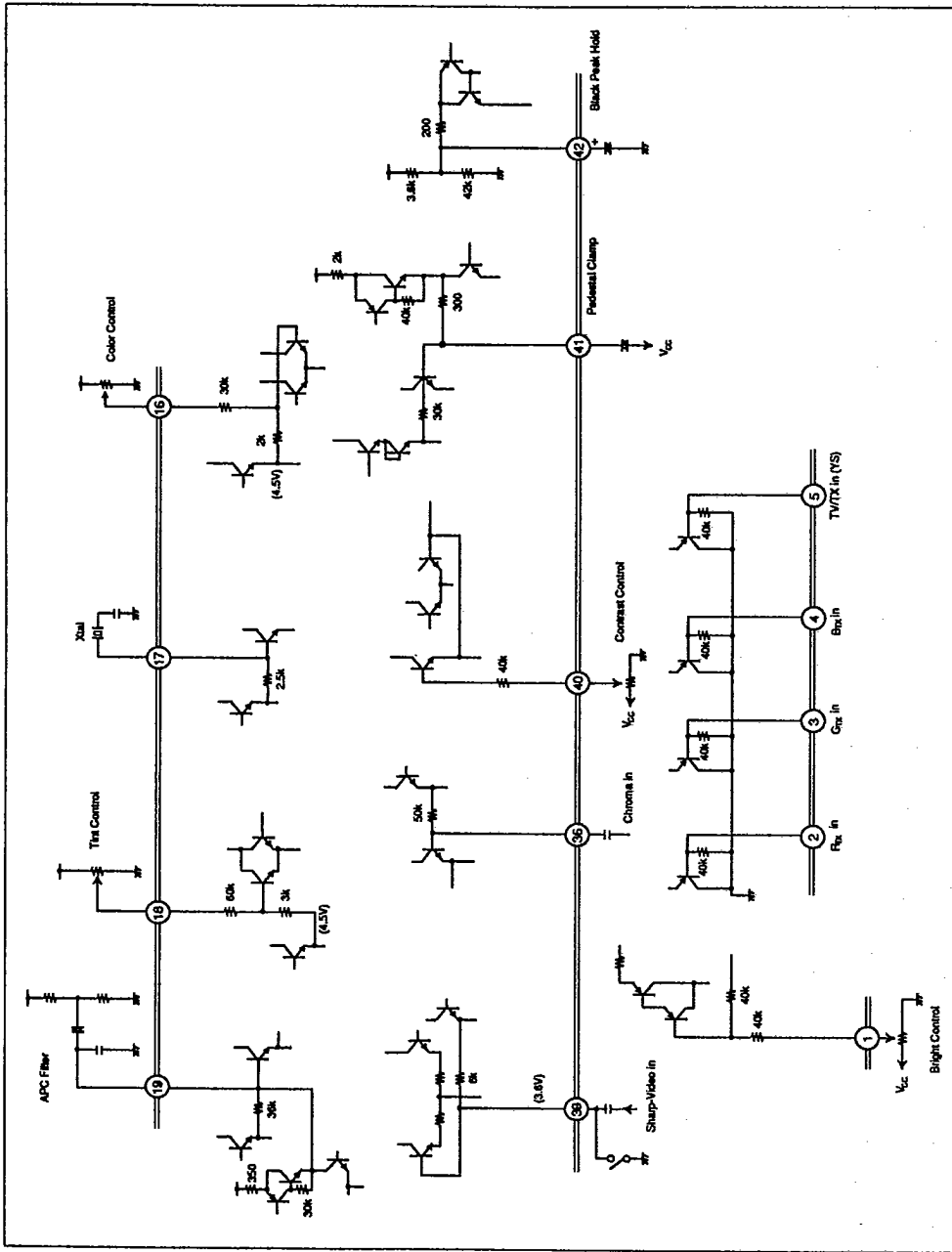
Pin Interface



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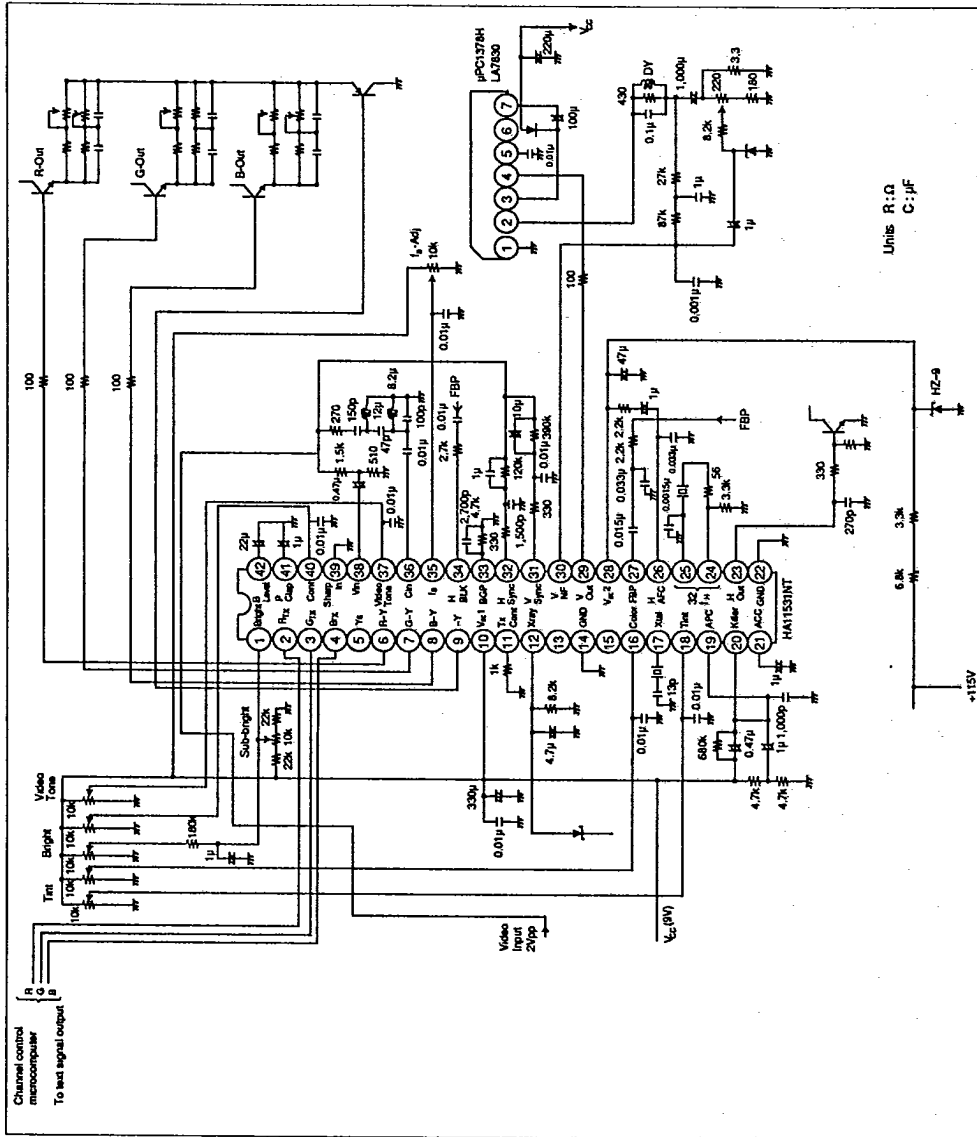
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T-77-07-09

Circuit Example



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