

# BIPOLAR ANALOG INTEGRATED CIRCUIT

# $\mu$ PC1488H

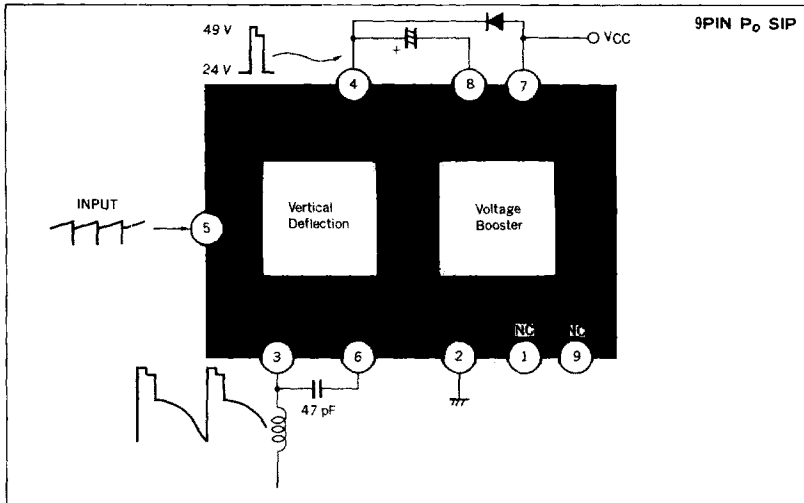
## VERTICAL DEFLECTION CIRCUIT OF COLOR TV

The  $\mu$ PC1488H is a vertical deflection output IC for color CRTs from 9 inches to 21 inches. As a boost pulse is generated internally, this IC is systematically connected with  $\mu$ PC1800CA or  $\mu$ PC1401CA. The package of 9 pin power SIP, attached to heat-sink by one screw, decreases work-loading for assembling.

### FEATURES

- Saves power dissipation for the voltage booster circuit.
- One screw attachment type package.
- This IC is systematically connected with  $\mu$ PC1800CA or  $\mu$ PC1401CA.

### BLOCK DIAGRAM



**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25 °C)**

Power Supply Voltage	V <sub>CC</sub> (V7)	30	V
Power Supply Current Drain	I <sub>CC</sub>	350	mA
Booster Voltage	V <sub>4</sub>	65	V
Input Voltage	V <sub>5</sub>	2.5	V
Output Current:	I <sub>DEF</sub> (I3)	-1.1 to +1.1	A <sub>peak</sub>
Booster Output Current	I <sub>g</sub>	-1.1 to +1.1	A <sub>peak</sub>
Terminal 8 Voltage	V <sub>8</sub>	V <sub>7</sub>	V
Power Dissipation	P <sub>D</sub>	6.0	W
Operating Temperature	T <sub>opt</sub>	-20 to +75	°C
Storage Temperature	T <sub>stg</sub>	-40 to +150	°C
Junction Temperature	T <sub>j</sub>	+150	°C

**RECOMMENDED CONDITIONS (T<sub>a</sub>= 25 °C)**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
Power Supply Voltage	V <sub>CC</sub>	20	24	27	V
Output Current	I <sub>DEF</sub>	0.6	-	1.4	A <sub>p-p</sub>

**ELECTRICAL CHARACTERISTICS (V<sub>CC</sub>= 24 V, T<sub>a</sub> = 25 °C, R<sub>L</sub> = 9 Ω, L = mH)**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
Power Supply Current	I <sub>CC</sub>	170	190	210	mA	
Output Current	I <sub>DEF</sub>	1.2	1.3	1.4	A <sub>p-p</sub>	
Output DC Voltage	V <sub>ODC</sub>	10.0	12.0	14.0	V	
Retrace Pulse Voltage	RPV	46	49	54	V	
Retrace Pulse Width	RPW	850	1000	1200	μs	
Idling Current	I <sub>Q</sub>	8	15	24	mA	
Booster Saturation 1	V <sub>S7-8</sub>		1.4	2.0	V	Discharging
Booster Saturation 2	V <sub>S8-2</sub>		1.0	1.5	V	Charging
Booster Charging Current	I <sub>g</sub>	55	85	120	mA	
Output Saturation 1	V <sub>S3-2</sub>		0.8	1.6	V	
Output Saturation 2	V <sub>S4-3</sub>		2.0	3.0	V	
Input Voltage	V <sub>5</sub>	0.85	1.0	1.15	V	
Voltage Gain	A <sub>VO</sub>		55		dB	
Input Resistance	R <sub>in</sub>		22		kΩ	
Thermal Resistance	R <sub>th(j-c)</sub>			5.0	°C/W	

7



