

# BIPOLAR ANALOG INTEGRATED CIRCUIT

# $\mu$ PC1498H

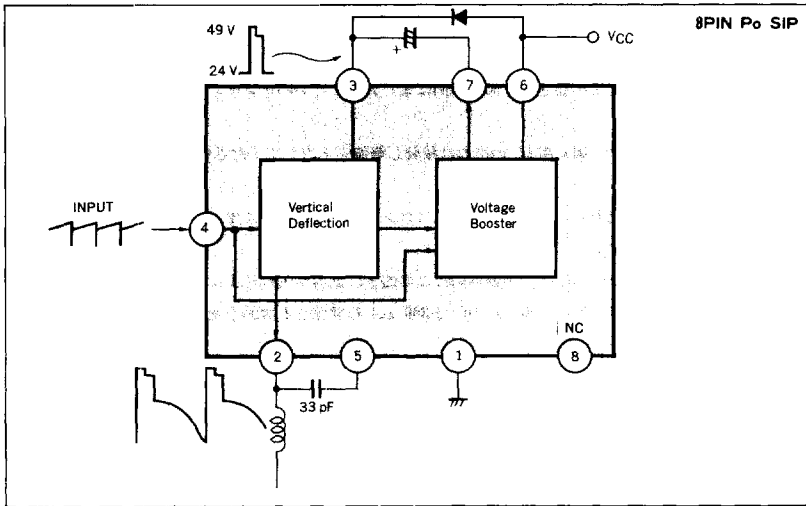
## VERTICAL DEFLECTION CIRCUIT OF COLOR TV

The  $\mu$ PC1498H is a vertical deflection output IC for large size color TV application more than 22 inches tube. As a boost pulse is generated internally, this IC is systematically connected with  $\mu$ PC1401CA or  $\mu$ PC1800CA. The package of 8 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 ( $T_a = +25\text{ }^\circ\text{C}$ )**

Power Supply Voltage	$V_{CC}$ (V <sub>6</sub> )	30	V
Power Supply Current	$I_{CC}$	350	mA
Booster Voltage	$V_3$	65	V
Input Voltage	$V_4$	2.5	V
Output Current	$I_{DEF}$	-1.5 to +1.5	A <sub>peak</sub>
Booster Output Current	$I_7$	-1.5 to +1.5	A <sub>peak</sub>
Terminal 7 Voltage	$V_7$	$V_6$	V
Power Dissipation	$P_D$	8.0	W
Operating Temperature	$T_{opt}$	-20 to +75	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$
Junction Temperature	$T_j$	+150	$^\circ\text{C}$

**RECOMMENDED OPERATING CONDITION ( $V_{CC}=24\text{ V}$ ,  $T_a=25\text{ }^\circ\text{C}$ ,  $R_L=6\text{ }\Omega$ ,  $L=9.4\text{ mH}$ )**

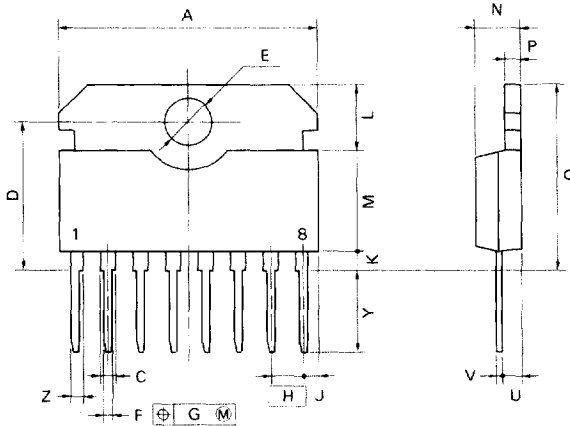
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
Power Supply Voltage	$V_{CC}$ (V <sub>6</sub> )	20	24	27	V
Output Current	$I_{DEF}$ (I <sub>2</sub> )	1.0	—	2.1	A <sub>p-p</sub>

**ELECTRICAL CHARACTERISTICS ( $T_a=25\text{ }^\circ\text{C}$ )**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
Power Supply Current	$I_{CC}$	240	270	300	mA	
Output Current	$I_{DEF}$	1.9	2.0	2.1	A <sub>p-p</sub>	
Output DC Voltage	$V_{ODC}$	10.0	12.0	14.0	V	
Retrace Pulse Voltage	RPV	46	49	54	V	
Retrace Pulse Width	RPW	550	650	750	$\mu\text{s}$	
Idling Current	$I_Q$	8	15	24	mA	
Booster Saturation 1	$V_{S6-7}$		1.8	2.4	V	Discharging
Booster Saturation 2	$V_{S7-1}$		1.0	1.5	V	Charging
Booster Charging Current	$I_7$	55	85	120	mA	
Output Saturation 1	$V_{S2-1}$		1.0	1.6	V	
Output Saturation 2	$V_{S3-2}$		2.4	3.0	V	
Input Voltage	$V_4$	0.85	1.0	1.15	V	
Voltage Gain	$A_{VO}$		55		dB	
Input Resistance	$R_{in}$		22		k $\Omega$	
Thermal Resistance	$R_{th(j-c)}$			4.0	$^\circ\text{C/W}$	



8 PIN PLASTIC POWER SIP



NOTE

Each lead centerline is located within 0.25 mm (0.01 inch) of its true position (T.P.) at maximum material condition.

PBHP 254B

ITEM	MILLIMETERS	INCHES
A	20.32 MAX.	0.8 MAX.
C	1.1 MIN	0.043 MIN
D	11.9 <sup>-0.3</sup>	0.469 <sup>±0.013</sup>
E	3.6 <sup>0.1</sup>	0.142 <sup>±0.004</sup>
F	0.75 <sup>0.1</sup>	0.03 <sup>±0.004</sup>
G	0.25	0.01
H	2.54	0.1
J	1.27 MAX.	0.05 MAX.
K	1.2 MIN	0.047 MIN.
L	5.1	0.201
M	8.1	0.319
N	3.5 <sup>-0.2</sup>	0.138 <sup>±0.008</sup>
P	1.3 <sup>0.1</sup>	0.051 <sup>±0.004</sup>
Q	15.0 MAX.	0.591 MAX.
U	1.9 MAX.	0.075 MAX.
V	0.4 <sup>-0.1</sup>	0.016 <sup>±0.004</sup>
Y	6.5 <sup>-0.7</sup>	0.256 <sup>-0.028</sup>
Z	0.85 MIN.	0.033 MIN.