

BIPOLAR ANALOG INTEGRATED CIRCUIT

μ PC1488H

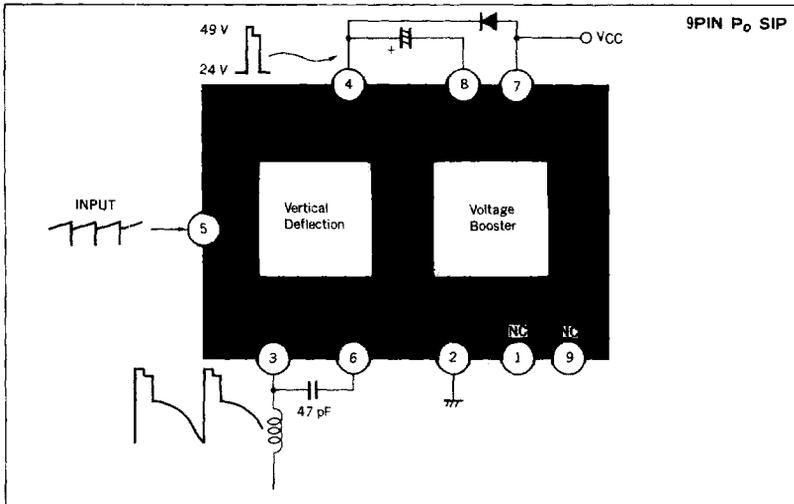
VERTICAL DEFLECTION CIRCUIT OF COLOR TV

The μ 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 μ PC1800CA or μ 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 μ PC1800CA or μ PC1401CA.

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS (T_a=25 °C)

Power Supply Voltage	V _{CC} (V7)	30	V
Power Supply Current Drain	I _{CC}	350	mA
Booster Voltage	V ₄	65	V
Input Voltage	V ₅	2.5	V
Output Current:	I _{DEF} (I3)	-1.1 to +1.1	A _{peak}
Booster Output Current	I _g	-1.1 to +1.1	A _{peak}
Terminal 8 Voltage	V ₈	V ₇	V
Power Dissipation	P _D	6.0	W
Operating Temperature	T _{opt}	-20 to +75	°C
Storage Temperature	T _{stg}	-40 to +150	°C
Junction Temperature	T _j	+150	°C

RECOMMENDED CONDITIONS (T_a= 25 °C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
Power Supply Voltage	V _{CC}	20	24	27	V
Output Current	I _{DEF}	0.6	-	1.4	A _{p-p}

ELECTRICAL CHARACTERISTICS (V_{CC}= 24 V, T_a = 25 °C, R_L = 9 Ω, L = mH)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
Power Supply Current	I _{CC}	170	190	210	mA	
Output Current	I _{DEF}	1.2	1.3	1.4	A _{p-p}	
Output DC Voltage	V _{ODC}	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 _Q	8	15	24	mA	
Booster Saturation 1	V _{S7-8}		1.4	2.0	V	Discharging
Booster Saturation 2	V _{S8-2}		1.0	1.5	V	Charging
Booster Charging Current	I _g	55	85	120	mA	
Output Saturation 1	V _{S3-2}		0.8	1.6	V	
Output Saturation 2	V _{S4-3}		2.0	3.0	V	
Input Voltage	V ₅	0.85	1.0	1.15	V	
Voltage Gain	A _{VO}		55		dB	
Input Resistance	R _{in}		22		kΩ	
Thermal Resistance	R _{th(j-c)}			5.0	°C/W	

7

PACKAGE DIMENSIONS (Unit : mm)

