

TA8445K

POWER AMPLIFIER FOR DRIVING A DEFLECTION CIRCUIT OF A COLOR TELEVISION

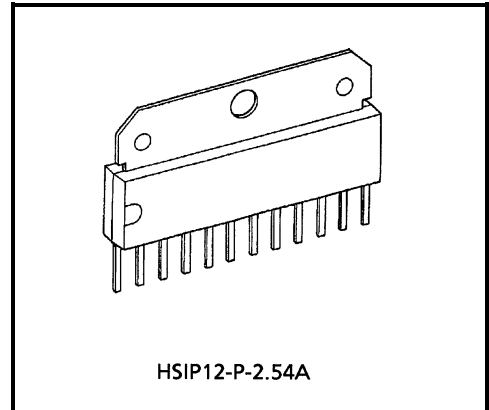
The TA8445K is a power amplifier for driving a deflection circuit of a middle and large screen size color television.

The TA8445K combines the vertical output circuit and the Ramp-generator in a 12-pin shrink DIP plastic package.

The TA8445K requires only vertical deflection positive pulse for vertical operation.

FEATURES

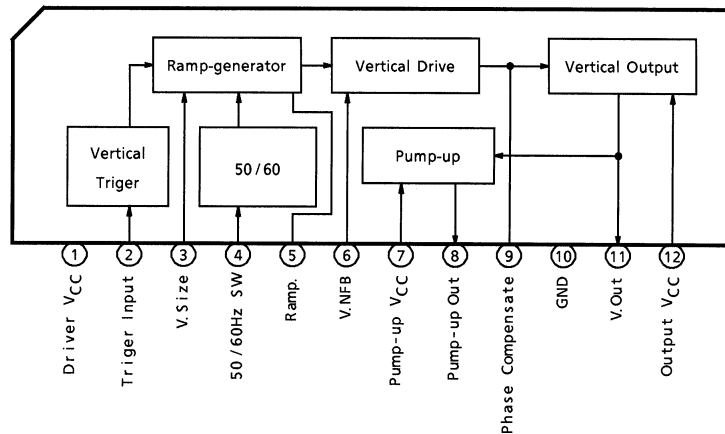
- Large output current : 2.2Ap-p (MAX.)
- Built-in Ramp-generator circuit
- Built-in V.Driver circuit
- 50 / 60Hz sw circuit
- Small power dissipation with a pump-up circuit
- Vertical output circuit
- Small number external parts



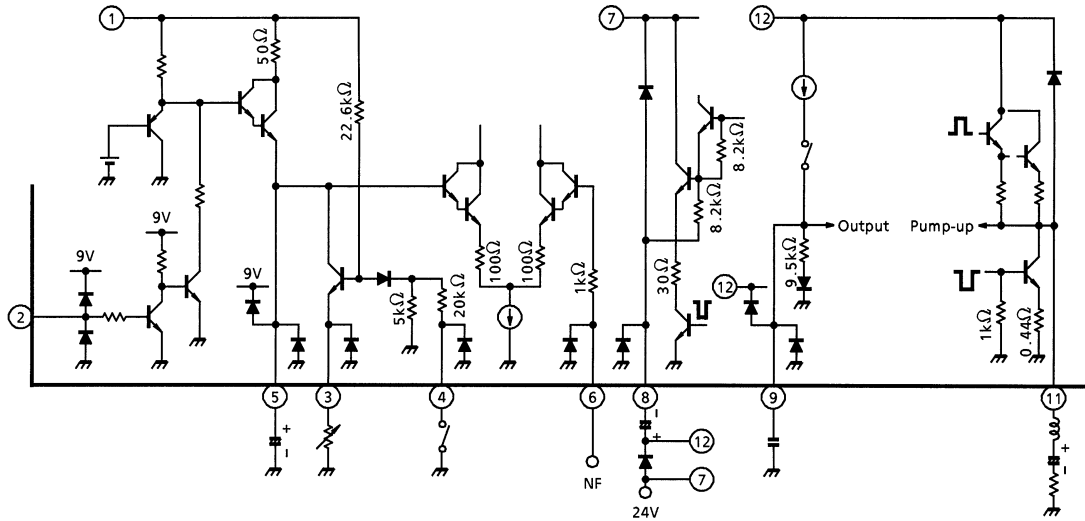
HSIP12-P-2.54A

Weight: 3.2g(Typ.)

BLOCK DIAGRAM



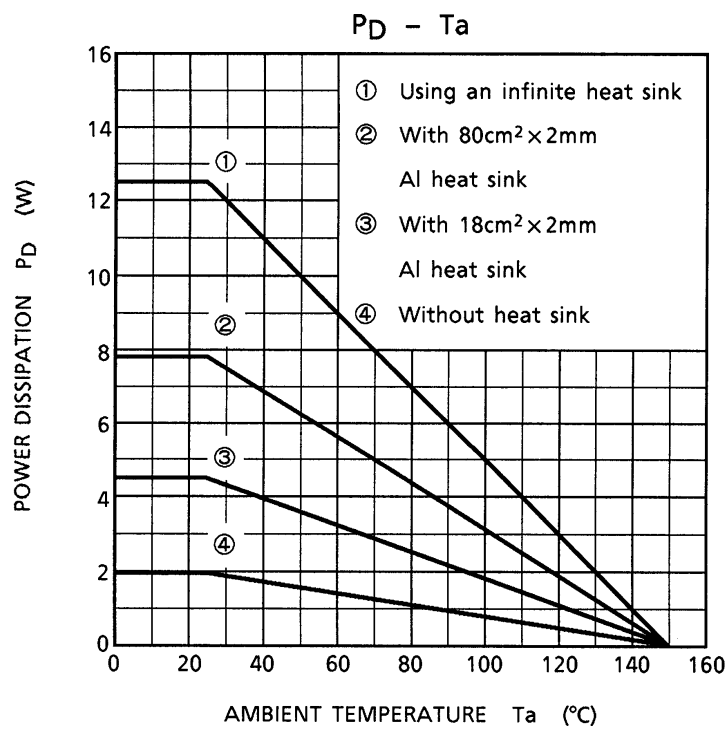
TERMINAL INTERFACE



MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
V.Driver Power Supply	V _{CC}	15	V
Pump-up Power Supply Voltage	V _{CC}	30	V
Vertical Output Supply Voltage	V _{CC}	60	V
Power Dissipation	P _{D max}	12.5 (Note)	W
Operating Temperature	T _{opr}	-20 ~ 85	°C
Storage Temperature	T _{stg}	-55 ~ 150	°C

Note: Using an infinite heat sink.



RECOMMENDED OPERATING CONDITION (Ta = 25°C)

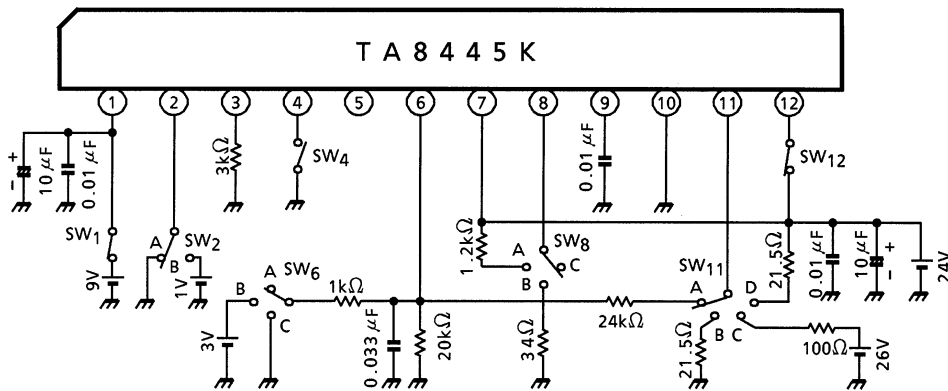
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX	UNIT
V.Driver Supply Voltage	V _{CC1}	8.1	9.0	9.9	V
Pump-up Supply Voltage	V _{CC2}	—	24	29	V
Deflection Output Current	I _{1p-p}	—	—	2.2	A _{p-p}

ELECTRICAL CHARACTERISTICS (Ta = 25°C, V_{CC1} = 9V, V_{CC2} = 24V)

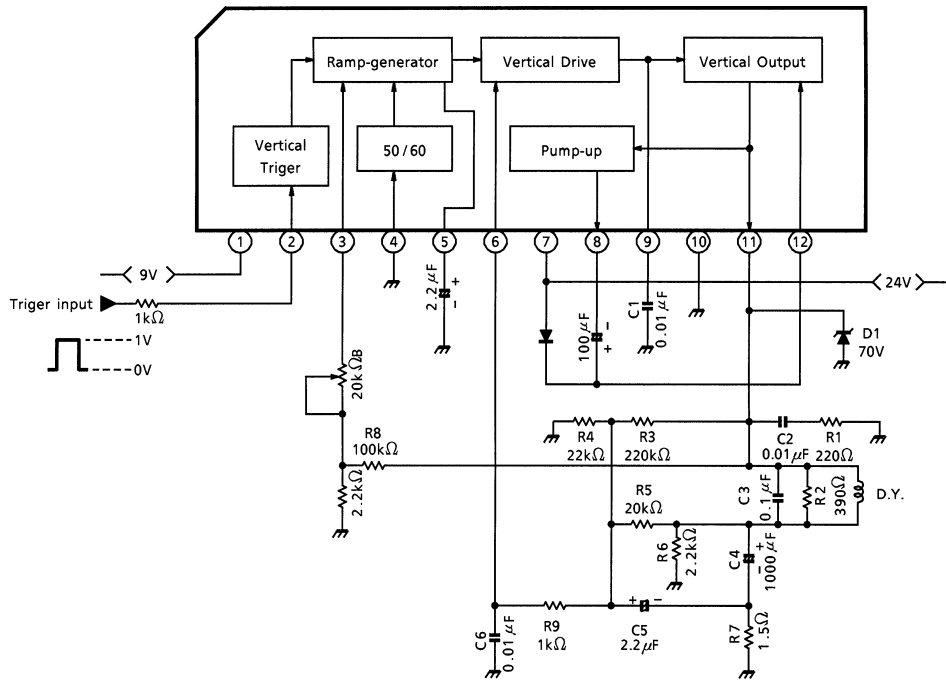
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN	TYP.	MAX	UNIT
V.Driver Supply Current	I _{CC1}	—	(Note 1)	2.0	5.0	12	mA
Vertical Triger Threshold Voltage	V ₂	—	(Note 2)	—	—	1.0	V
Vertical Amplitude Cont. Voltage (1)	V ₃ ⁶⁰	—	(Note 3)	1.0	1.5	2.0	V
Vertical Amplitude Cont. Voltage (2)	V ₃ ⁵⁰	—	(Note 11)	0.75	1.25	1.75	V
Ramp-signal Maximum Voltage	V ₅	—	(Note 4)	3.5	4.8	6.0	V
Ramp-signal Maximum Amplitude	V _{5p-p}	—	(Note 4)	3.5	4.5	5.5	V _{p-p}
Output Triger Satulation Voltage (1)	V _{S11-10}	—	(Note 5)	0.3	0.5	1.0	V
Output Triger Satulation Voltage (2)	V _{S12-11}	—	(Note 6)	1.0	1.8	3.6	V
Pump-up Triger Satulation Voltage (1)	V _{S7-8}	—	(Note 7)	1.0	2.0	3.0	V
Pump-up Triger Satulation Voltage (2)	V _{S8-10}	—	(Note 8)	0.2	0.8	1.6	V
Idling Current	I _b	—	(Note 9)	—	26	—	mA
Vertical Output Center Voltage	V _{CENTER}	—	(Note 10)	8.0	12.0	14.0	V

NOTE	SW MODE							TEST TERMINAL
	1	2	4	6	8	11	12	
1	ON	A	OFF	A	C	A	ON	1
2	ON	B	OFF	A	C	A	ON	5
3	ON	A	OFF	A	C	A	ON	3
4	ON	A	OFF	A	C	A	ON	5
5	ON	B	OFF	B	C	D	ON	11
6	OFF	A	OFF	C	C	B	ON	11 - 12
7	OFF	A	OFF	A	B	C	OFF	7 - 8
8	OFF	A	OFF	A	A	A	OFF	8
9	ON	A	OFF	A	C	A	ON	12
10	ON	A	OFF	A	C	A	ON	11
11	ON	A	ON	A	C	A	ON	3

TEST CIRCUIT



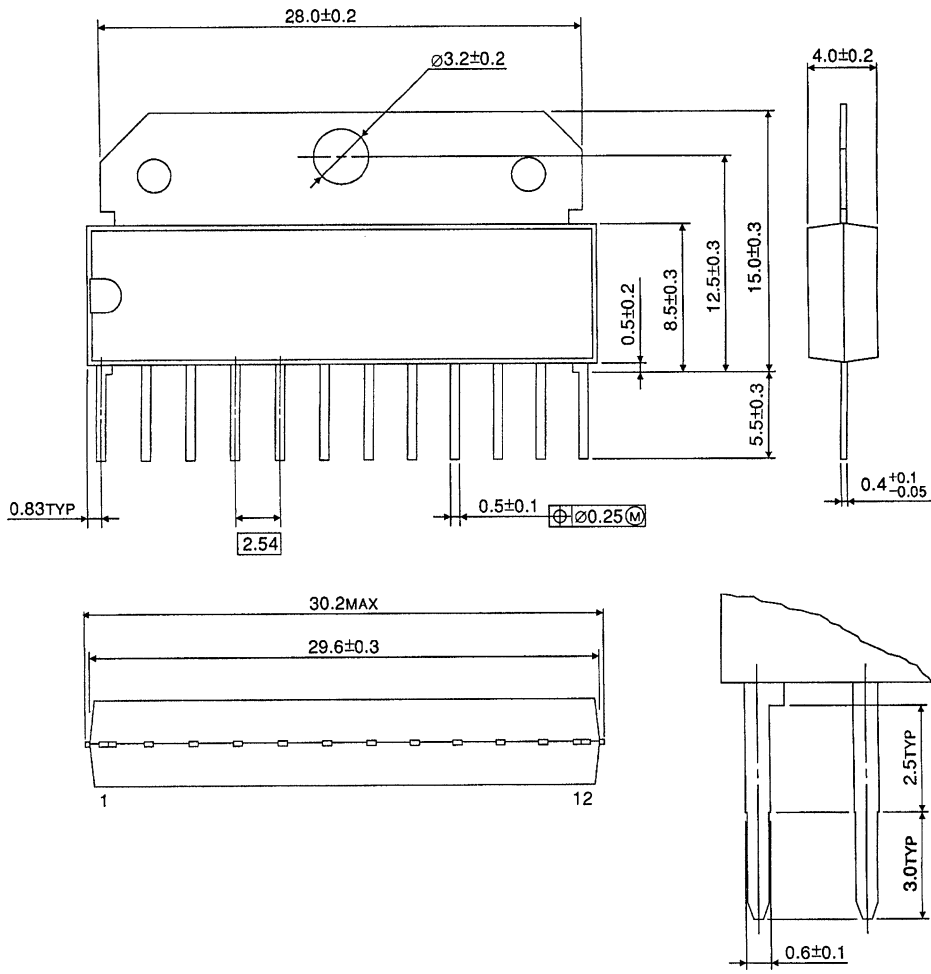
APPLICATION CIRCUIT



PACKAGE DIMENSIONS

HSIP12-P-2.54A

Unit : mm



Weight: 3.2g (Typ.)

RESTRICTIONS ON PRODUCT USE

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