

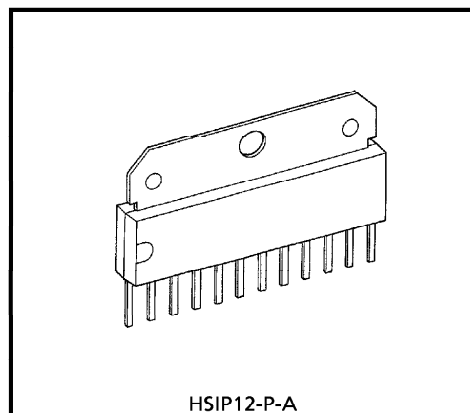
TA8432K

POWER AMPLIFIER FOR DRIVING A DEFLECTION CIRCUIT OF A COLOR TELEVISION

The TA8432K is a Vertical-Deflection-Output circuit IC for middle and large aperture color televisions.

The TA8432K combines the vertical output circuit and the Ramp-generator in a 12 leads single-in-line type plastic package.

The TA8432K requires only vertical deflection negative pulses for vertical operation.

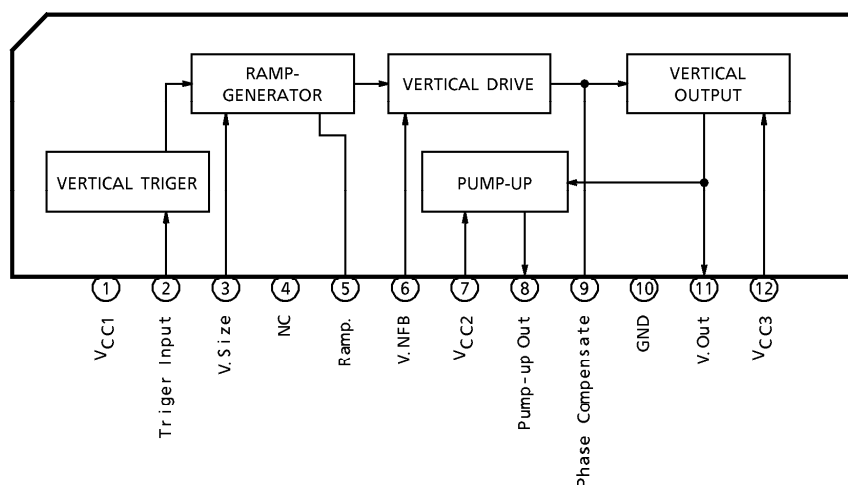


Weight : 3.2g (Typ.)

FEATURES

- Large output current : 2.2A_{p-p} (MAX.)
- Built-in Ramp-generator
- Built-in V.Driver circuit
- Small power dissipation Pump-Up circuit
- Vertical Output circuit
- Minimum number of external components'

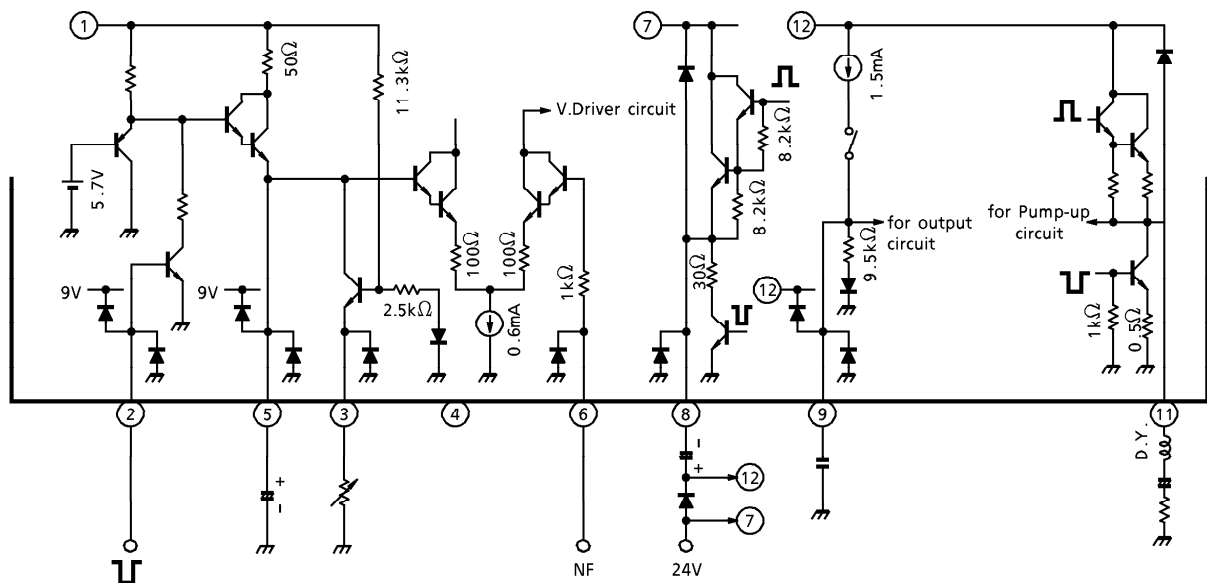
BLOCK DIAGRAM



961001EBA2

- TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.
- The products described in this document are subject to foreign exchange and foreign trade control laws.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.

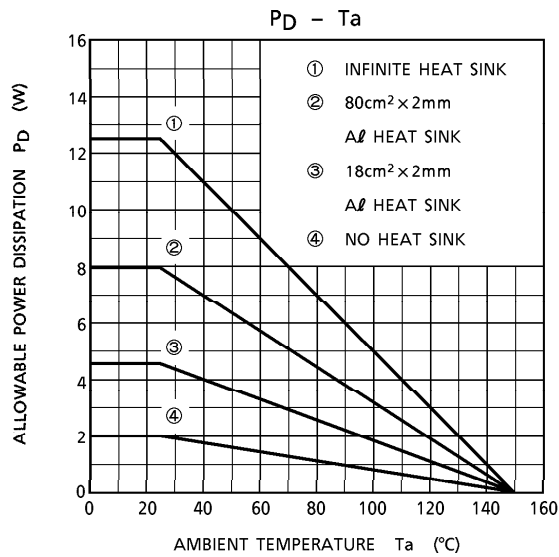
TERMINAL INTERFACE



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) Operate at Ta = 25°C with an infinite heat-sink.
With other heat-sink is shown below.



RECOMMENDED OPERATING CONDITIONS (Ta = 25°C)

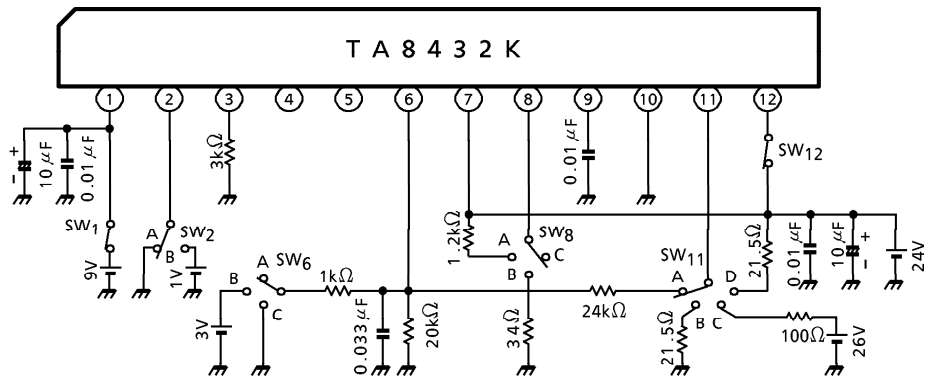
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
V.Driver Supply Voltage	V _{CC1}	8.1	9.0	9.9	V
Pump-up Supply Voltage	V _{CC2}	—	24	29	V
Deflection Output Current	I _{11p-p}	—	—	2.2	A _{p-p}

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

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

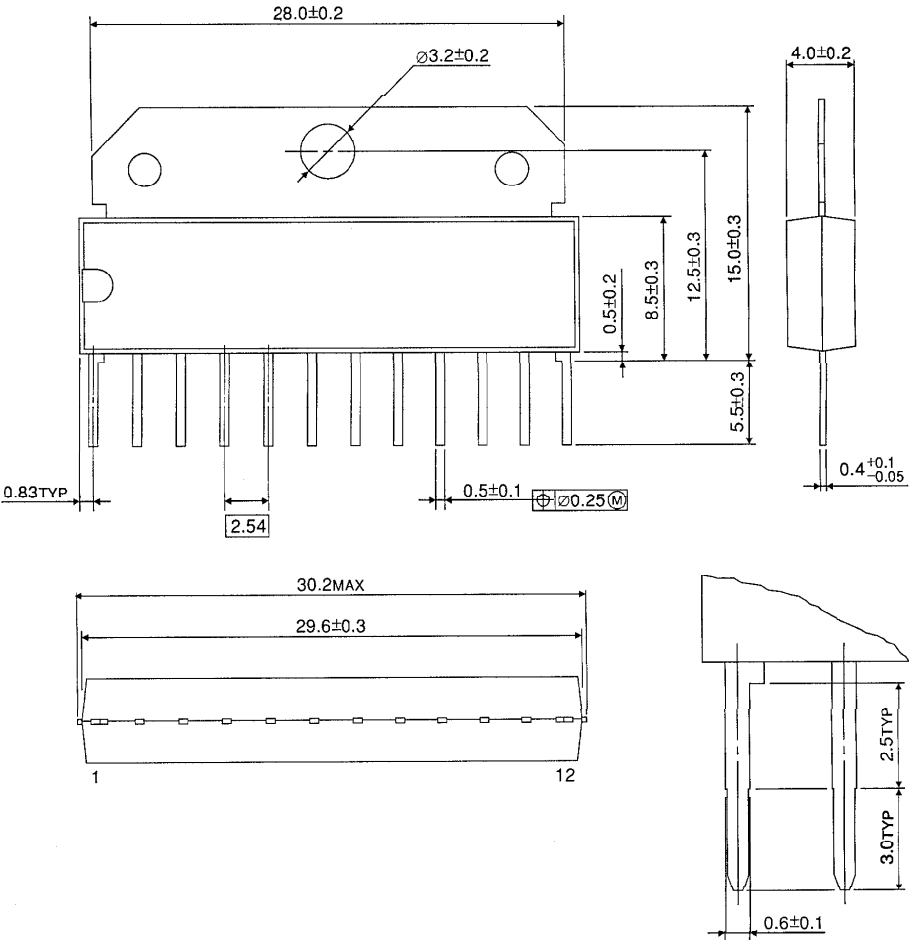
NOTE	SW						TEST TERMINAL
	1	2	6	8	11	12	
1	ON	A	A	C	A	ON	1
2	ON	B	A	C	A	ON	5
3	ON	A	A	C	A	ON	3
4	ON	A	A	C	A	ON	5
5	ON	B	B	C	D	ON	11
6	OFF	A	C	C	B	ON	12 – 11
7	OFF	A	A	B	C	OFF	7 – 8
8	OFF	A	A	A	A	OFF	8
9	ON	A	A	C	A	ON	12
10	ON	A	A	C	A	ON	11

TEST CIRCUIT



OUTLINE DRAWING
HSIP12-P-A

Unit : mm



Weight : 3.2g (Typ.)