

# 8-channel high current driver

## BA6212

The BA6212 is a monolithic IC including 8 circuits and capable of high current drive. Capable of using a current as high as 400mA, it has a strobe pin, and is thus ideal for use as a driver circuit in thermal printers. Its input can be directly coupled to CMOS devices.

●Applications

Thermal printers

Motors

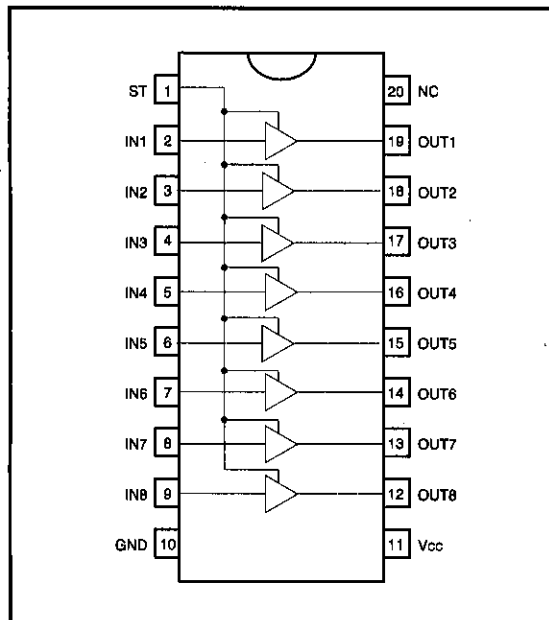
Relays

LEDs and other drivers

●Features

- 1) High current drive capability of up to 400mA.
- 2) 8 circuits included.
- 3) Equipped with a strobe pin.
- 4) Easy installation due to inputs and outputs being aligned in the same direction.
- 5) Input can be directly connected to CMOS devices.

●Block diagram



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V <sub>CC</sub>	7	V
Power dissipation	P <sub>d</sub>	1100*	mW
Operating temperature	T <sub>opr</sub>	-25~75	°C
Storage temperature	T <sub>stg</sub>	-55~125	°C
Maximum output current	I <sub>OUT</sub>	400	mA
Maximum output voltage	V <sub>OUT</sub>	14	V
Maximum input voltage	V <sub>IN</sub>	V <sub>CC</sub>	V

\* Reduce 11 mW for each 1°C when using the product at Ta=25°C or higher.

● Internal circuit configuration diagram

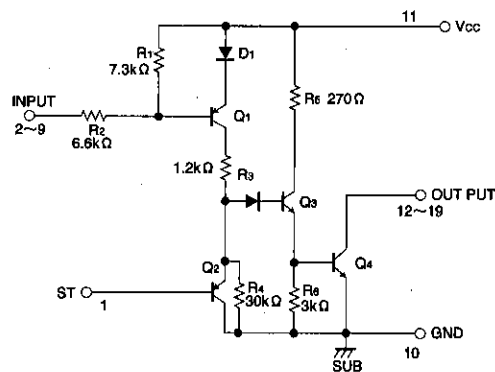


Fig.1

● Electrical characteristics (unless otherwise noted, Ta=25°C, V<sub>CC</sub>=5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Output saturation voltage 1	V <sub>OUT 1</sub>	—	0.2	0.3	V	I <sub>OUT</sub> =200mA, V <sub>IN</sub> =1V
Output saturation voltage 2	V <sub>OUT 2</sub>	—	0.4	0.6	V	I <sub>OUT</sub> =400mA, V <sub>IN</sub> =1V
Output leakage current 1	I <sub>OL 1</sub>	—	—	100	μA	V <sub>IN</sub> =3.6V, V <sub>OUT</sub> =12V
Output leakage current 2	I <sub>OL 2</sub>	—	—	100	μA	V <sub>IN</sub> =1V, V <sub>OUT</sub> =12V, V <sub>ST</sub> =0.3V
Input current	I <sub>IN</sub>	—	-0.5	-1	mA	V <sub>IN</sub> =0V, I <sub>OUT</sub> =0mA
"L" input voltage	V <sub>IL</sub>	—	—	1	V	—
"H" input voltage	V <sub>IH</sub>	3.6	—	—	V	—

● Application example

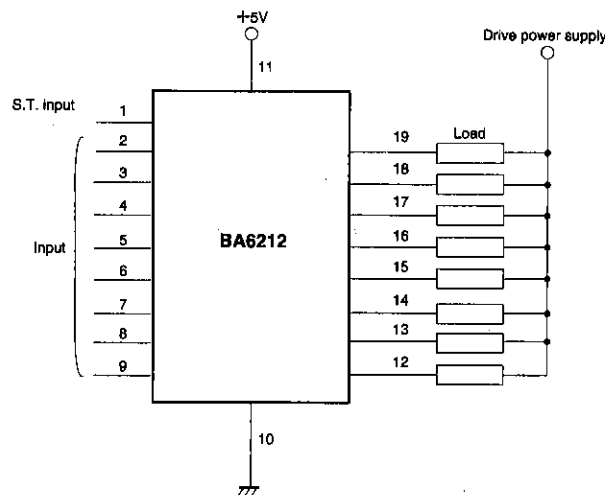


Fig.2

● Electrical characteristic curves

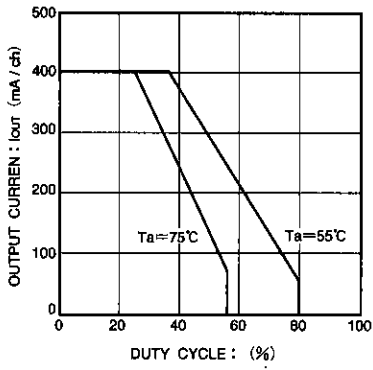


Fig. 3 Maximum output current when all channels are ON simultaneously

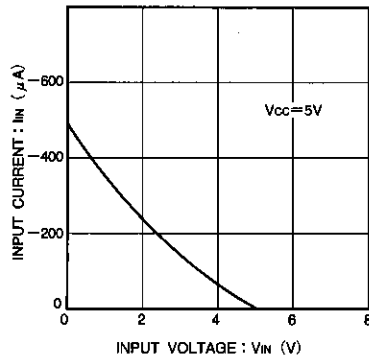


Fig. 4 Input current characteristic

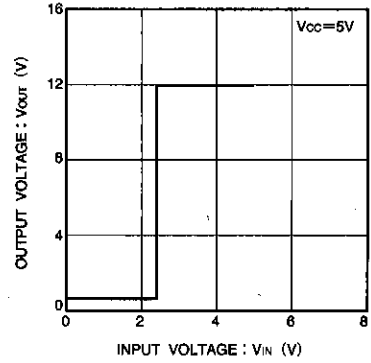


Fig. 5 Input threshold voltage characteristic

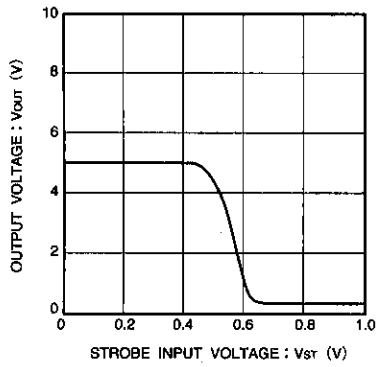
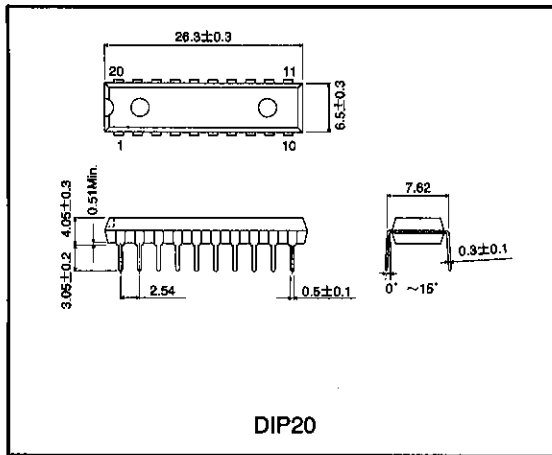


Fig. 6 Strobe input characteristic

● External dimensions (Units: mm)



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