

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

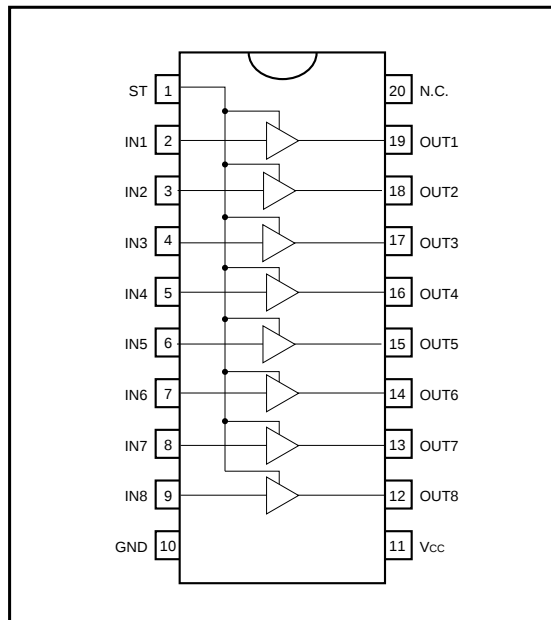
Relays

LEDs and other drivers

●Features

- 1) High current drive capability of 400mA (Max).
- 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 _{CC}	7	V
Power dissipation	P _d	1100*	mW
Operating temperature	T _{opr}	− 25 ~ + 75	°C
Storage temperature	T _{stg}	− 55 ~ + 125	°C
Maximum output current	I _{OUT}	400	mA
Maximum output voltage	V _{OUT}	14	V
Maximum input voltage	V _{IN}	V _{CC}	V

* Reduced by 11mW for each increase in Ta of 1°C over 25°C.

● Internal circuit configuration

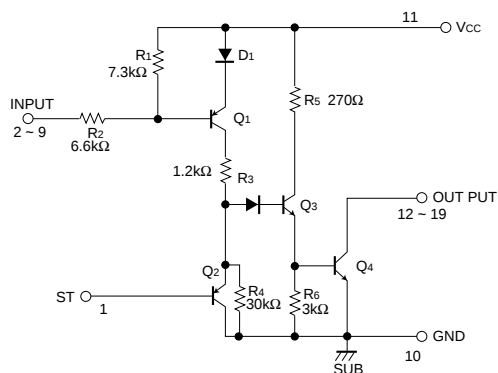


Fig. 1

● Electrical characteristics (unless otherwise noted, Ta = 25°C, V_{CC} = 5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Output saturation voltage 1	V _{OUT 1}	—	0.2	0.3	V	I _{OUT} = 200mA, V _{IN} = 1V
Output saturation voltage 2	V _{OUT 2}	—	0.4	0.6	V	I _{OUT} = 400mA, V _{IN} = 1V
Output leakage current 1	I _{OL 1}	—	—	100	μA	V _{IN} = 3.6V, V _{OUT} = 12V
Output leakage current 2	I _{OL 2}	—	—	100	μA	V _{IN} = 1V, V _{OUT} = 12V, V _{ST} = 0.3V
Input current	I _{IN}	—	− 0.5	− 1	mA	V _{IN} = 0V, I _{OUT} = 0mA
Input low level voltage	V _{IL}	—	—	1	V	—
Input high level voltage	V _{IH}	3.6	—	—	V	—

● Application example

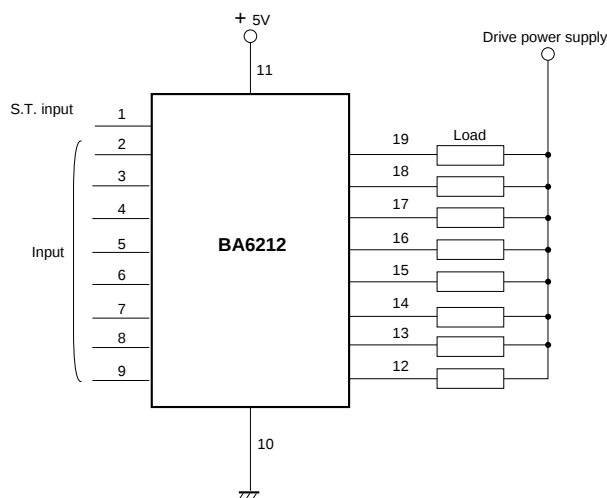


Fig. 2

●Electrical characteristic curves

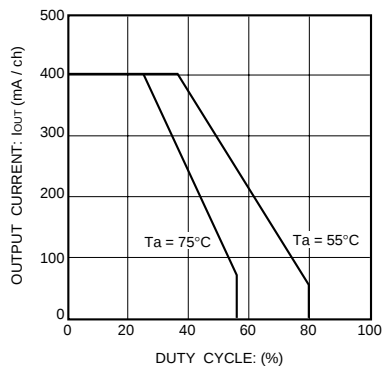


Fig. 3 Maximum output current when all channels are ON simultaneously

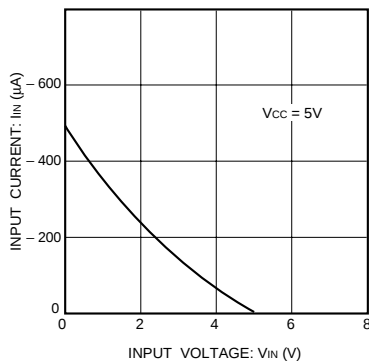


Fig. 4 Input current characteristics

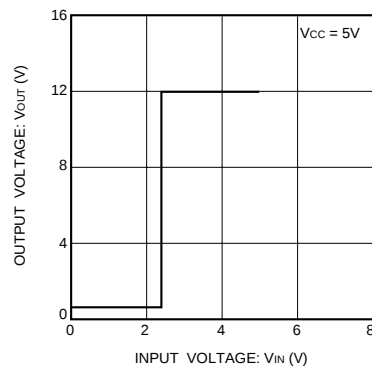


Fig. 5 Input threshold voltage characteristics

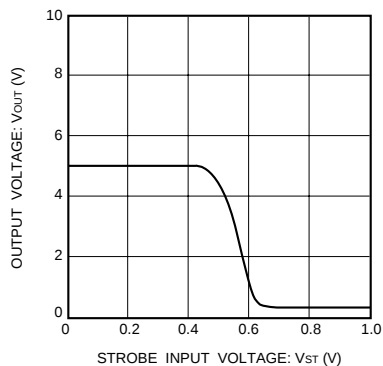


Fig. 6 Strobe input characteristics

●External dimensions (Units: mm)

