

Reversible motor driver

BA6218

The BA6218 reversible-motor driver supplies an output current of 0.7A (maximum). Two logic inputs allow four output modes: forward, reverse, idling, and braking. The logic section and power section have separate ground pins. By connecting an electronic governor, the IC can be used for controlling reversible, variable-speed motors.

● Features

- 1) Built-in surge absorbing diodes.
- 2) Small standby supply current.
- 3) Wide range of operating voltage. (4.5 ~ 15V)
- 4) Interfaces with TTL devices.

● Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|------------------------|------------------|----------|------|
| Power supply voltage | V _{CC} | 18 | V |
| Power dissipation | P _d | 800* | mW |
| Operating temperature | T _{opr} | -20~+60 | °C |
| Storage temperature | T _{stg} | -55~+125 | °C |
| Maximum output current | I _o | 0.7 | A |

* Reduced by 8 mW for each increase in Ta of 1°C over 25°C.

● Recommended operating conditions (Ta = 25°C)

| Parameter | Min. | Typ. | Max. | Unit |
|--|------|------|------|------|
| Voltage applied between V _{CC} (pin 6) and GND (pins 2 and 5) | 4.5 | — | 15 | V |
| Voltage applied between V _{CC} (pin 6) and COM (pin 8) | 4.0 | — | 15 | V |

● Electrical characteristics (unless otherwise noted, Ta = 25°C, V_{CC} = 9V)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions | Measurement circuit |
|---------------------------|-----------------|------|------|------|------|---|---------------------|
| Supply current 1 | I _{o1} | 18 | 34 | 50 | mA | 1pin "H", 3pin "L" or 1pin "L", 3pin "H", R _L =∞ | Fig.2 |
| Supply current 2 | I _{o2} | 34 | 52 | 70 | mA | 1pin "H", 3pin "H", R _L =∞ | Fig.2 |
| Standby supply current | I _{ST} | — | 1 | 11 | μA | 1pin "L", 3pin "L" | Fig.2 |
| Input high level voltage | V _{IH} | 2.0 | — | — | V | — | Fig.2 |
| Input low level voltage | V _{IL} | — | — | 0.8 | V | — | Fig.2 |
| Input high level current | I _H | — | 93 | 135 | μA | V _{IN} =2.0V | Fig.2 |
| Output saturation voltage | V _{CE} | — | 1.2 | 1.6 | V | I _o Sum of high and low side output transistor voltages with I _o = 200 mA | Fig.2 |

● Input truth table

| 3pin (IN) | 1pin (IN) | 7pin (OUT) | 9pin (OUT) |
|-----------|-----------|------------|------------|
| H | L | L | H |
| L | H | H | L |
| H | H | L | L |
| L | L | OPEN | OPEN |

Note : HIGH level input is 2.0 V or more.
 LOW level input is 0.8 V or less.

● Internal circuit configuration

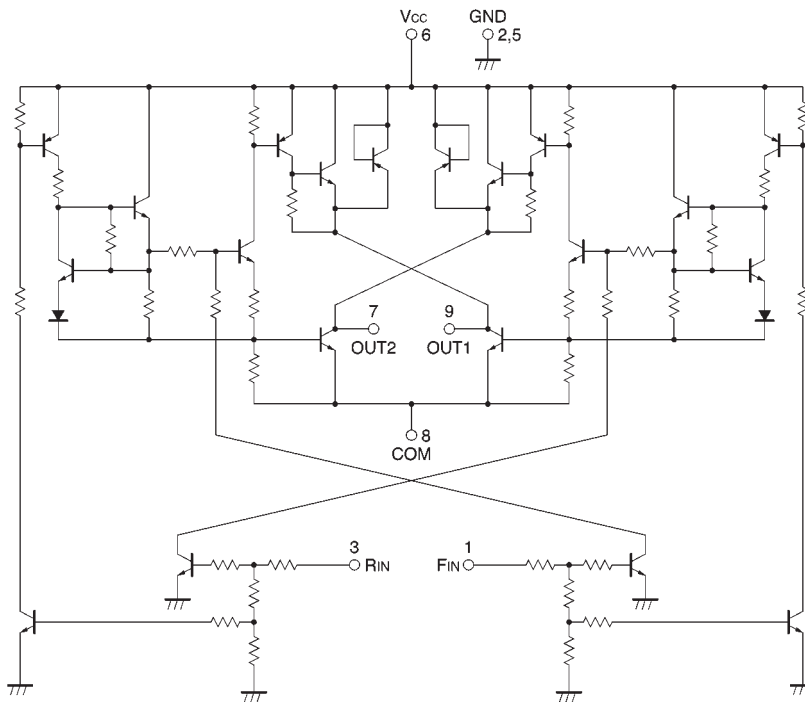


Fig.1

● Measurement circuit

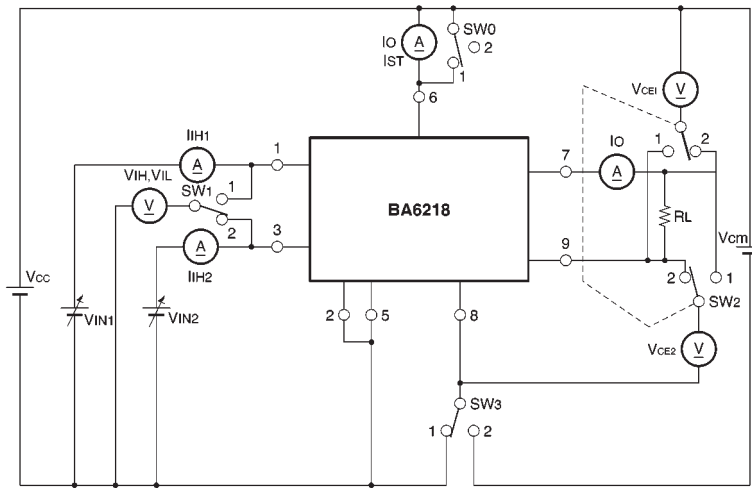


Fig.2

● Application examples

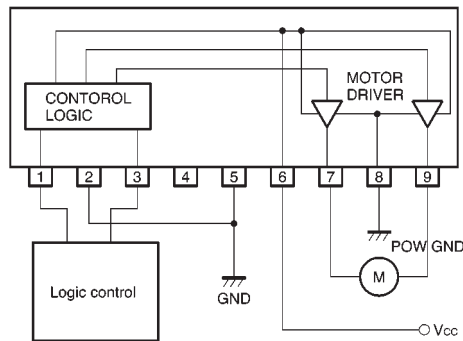


Fig.3

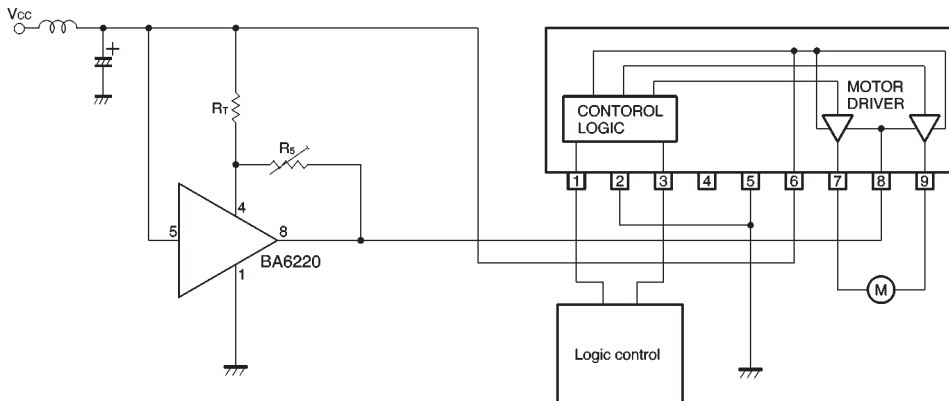
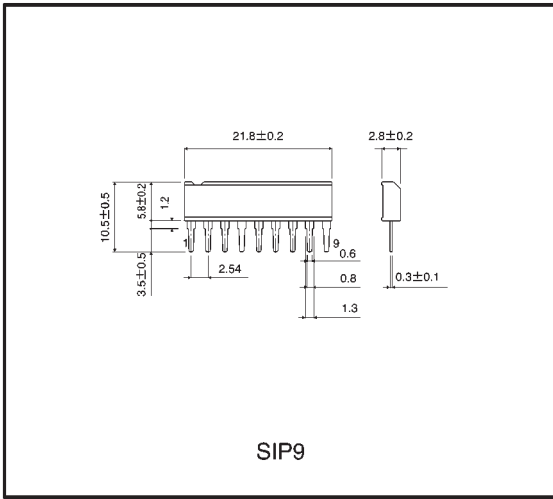


Fig.4

● External dimensions (Units: mm)



This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.