

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 circuit 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

* Reduce power by 8 mW for each degree above 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
Circuit current 1	I _{o1}	18	34	50	mA	1pin "H", 3pin "L" or 1pin "L", 3pin "H", R _L =∞	Fig.2
Circuit current 2	I _{o2}	34	52	70	mA	1pin "H", 3pin "H", R _L =∞	Fig.2
Standby circuit current	I _{sr}	—	1	11	μA	1pin "L", 3pin "L"	Fig.2
HIGH level input voltage	V _{IH}	2.0	—	—	V	—	Fig.2
LOW level input voltage	V _{IL}	—	—	0.8	V	—	Fig.2
HIGH level input 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/output 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

● Equivalent circuit diagram

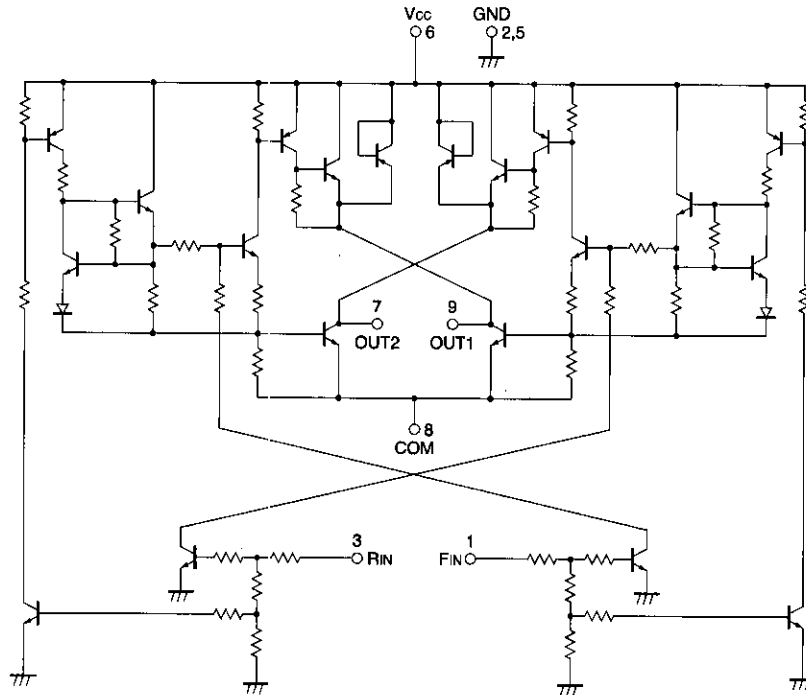


Fig.1

● Measurement circuit

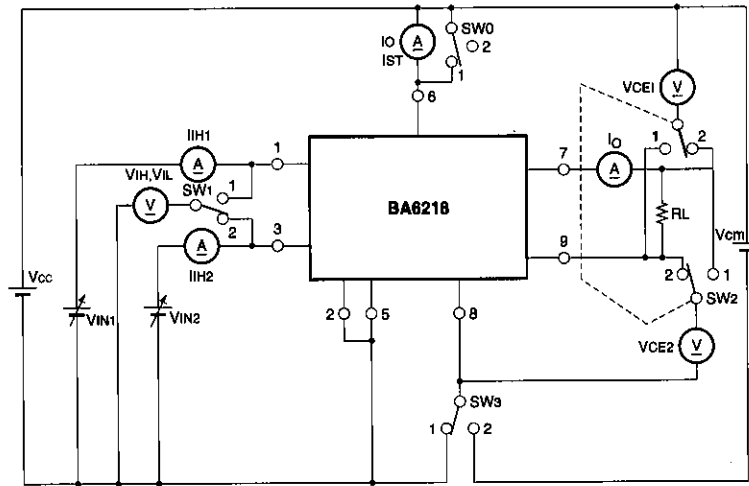


Fig.2

● Application circuit example

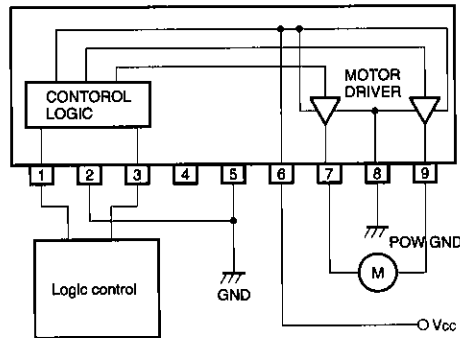


Fig.3

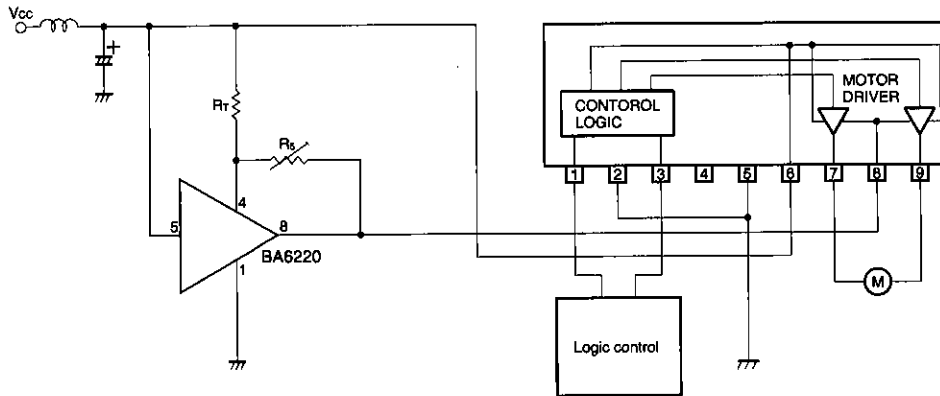


Fig.4

●External dimensions (Units: mm)

