BA6229

BA6229 provides an output current up to 1.2A. There are four output modes (normal, reverse, stop (idling), and braking) which can be selected by the input logic (two inputs).
The output voltage can be set by an external zener diode.

●Features

(1)Quiescent device current at stand-by is extremely small.

(2)It is easy to interface with CMOS control systems.

(3)The output voltage setting terminal enable you to set the output voltage at any desired value.

●Electrical Characteristics

Absolute maximum rating (Ta=25℃)

Parameter	Symbol	Rating	Unit
Supply voltage	V_{CC1} V_{CC2}	24	V
Power dissipation	Pd	2200 ※1	mW
Operating temperature range	T_{opr}	−20～+75	℃
Storage temperature range	T_{stg}	−50～+125	℃
Output current	I_O	1.2 ※2	A
Input voltage range	V_{IN}	−0.3～V_{CC1}	V

※1 To use at temperatures over Ta=25℃, derate 22mW per 1℃.

※2 Pulse with duty 1/100 ; 500μs

Electrical characteristics (Unless otherwise specified, Ta=25℃, V_{CC}=12V)

Parameter	Symbol	Standard value			Unit	Condition
		Min.	Typ.	Max.		
Operating voltate range	V_{CC1} V_{CC2}	8	—	23	V	
Quiescent device current 1	I_{CC1}	—	0.7	3	mA	pin5, pin6;"L", R_L=∞
Quiescent device current 2	I_{CC2}	—	8	20	mA	Pin 5 and 6 have opposite levels, R_L=∞
Quiescent device current 3	I_{CC3}	—	12	30	mA	pin5, pin6;"H", R_L=∞
Pin5 and pin6 input threshold voltage	V_{TH5} V_{TH6}	1	2	3	V	L ≦ 1V, H ≧ 3V
Pin2 output voltage"H"	V_{H2}	6.5	7.0	8.0	V	pin5"H", pin6"L", R_L=60Ω ZD=6.8V
Pin10 output volgage"H"	V_{H10}	6.5	7.0	8.0	V	pin5"L", pin6"H", R_L=60Ω ZD=6.8V

Electrical characteristics (Unless otherwise specified, Ta=25℃, V_{cc}=12V)

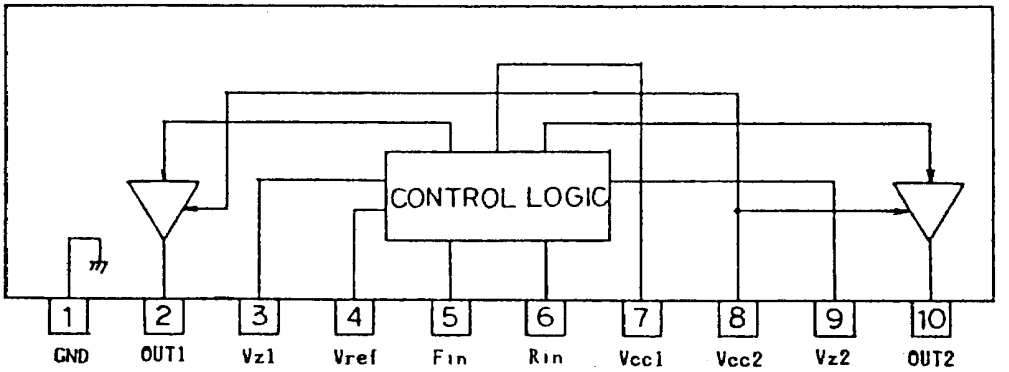
Parameter	Symbol	Standard value			Unit	Condition
		Min.	Typ.	Max.		
Pin2 output voltage"L"	V_{L2}	—	0.8	1.2	V	pin5"L", pin6"H", R_L=60Ω
Pin10 output volgage"L"	V_{L10}	—	0.8	1.2	V	pin5"H", pin6"L", R_L=60Ω

● Input truth table

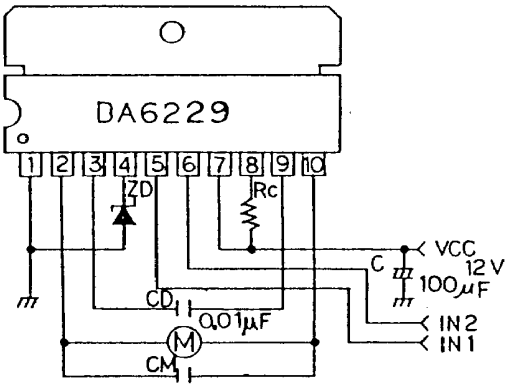
pin5(IN)	pin6(IN)	pin2(OUT)	pin10(OUT)
L	L	OPEN	OPEN
H	L	H	L
L	H	L	H
H	H	L	L

Note : Input level "H" is 3.0V or more.
Input level "L" is 1.0V or less.

● Block Diagram

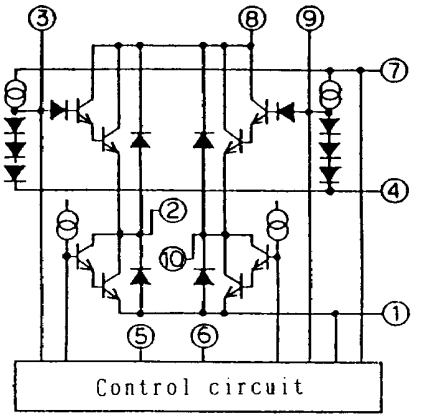


● Typical Application Circuit



● Input and Output Circuit

(equivalent circuit)



ZD ; Zener diode to set the output voltage.
Use an appropriate diode.

Rc ; Resistor to reduce the collector loss and limit short-circuit current.
Use a resistor of about 10Ω.

CM ; When necessary, add CM depending on the setting condition.
Use one of 0.01 to 0.1μF.