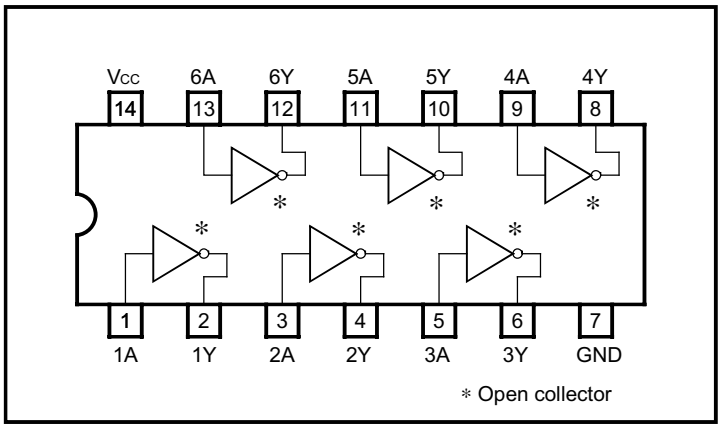
6-channel inverter
BA6266 / BA6266F

The BA6266 and BA6266F are driver ICs featuring high output voltage capability and high-current open collector output, and having six built-in inverter buffer circuits.
The open collector output enables “AND” ties. In addition, clamp diodes are connected to all inputs, minimizing error caused by ringing and other factors. These inverters feature a high output pressure withstand resistance of 30V, as well as a large output power supply (sink current) of 40mA, making them suitable for use in LED drivers and interfaces with other elements.

●Applications
General-purpose digital equipment

●Features
1) High output current. (I_{OL} = 40mA)
2) High output voltage. (V_O = 30V)
3) “AND” ties enabled.
4) Wide range of operating temperatures.

●Block diagram



●Absolute maximum ratings (Ta = 25°C)

Parameter		Symbol	Limits	Unit
Power supply voltage		V_{CC}	7	V
Power dissipation	BA6266	Pd	600*1	mW
	BA6266F		550*2	
Operating temperature		Topr	0 ~ + 70	°C
Storage temperature		Tstg	– 55 ~ + 125	°C
Input voltage		V_I	5.5	V
Output voltage		V_O	33	V

*1 Reduced by 6.0mW for each increase in Ta of 1°C over 25°C.
*2 Reduced by 5.5mW for each increase in Ta of 1°C over 25°C.

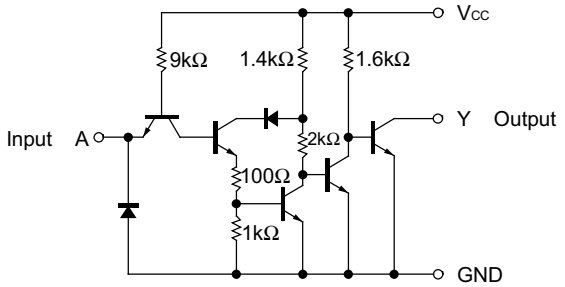
●Recommended operating conditions (Ta = 25°C, V_{CC} = 5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply voltage	V_{CC}	4.75	5	5.25	V	—
Output voltage	V_O	—	—	30	V	When output is "H"

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input high level voltage	V_{IH}	2	—	—	V	—
Input low level voltage	V_{IL}	—	—	0.8	V	—
Output saturation voltage 1	V_{OL1}	—	—	0.4	V	V_{CC} = 4.75V, I_{OL} = 16mA
Output saturation voltage 2	V_{OL2}	—	—	0.7	V	V_{CC} = 4.75V, I_{OL} = 40mA

●Internal equivalent circuit diagram



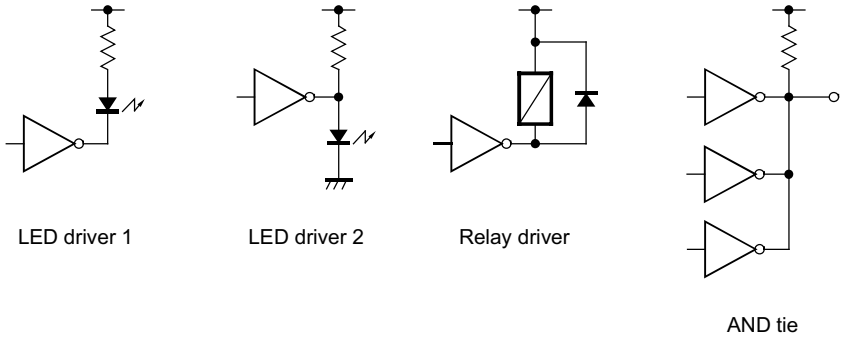
(Resistance values are typical values.)

Fig.1

●Truth table

A	Y
H	L
L	H

●Application examples



LED driver 1 LED driver 2 Relay driver AND tie

Fig.2

● Electrical characteristics curves

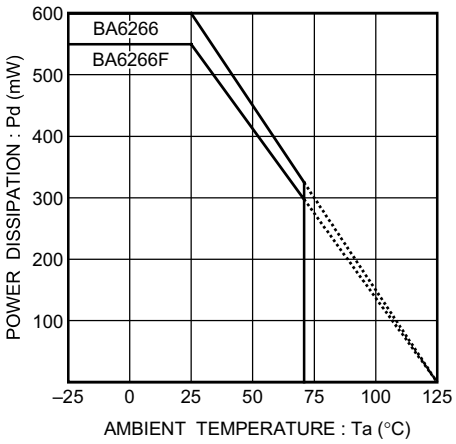


Fig.3 Power dissipation vs. ambient temperature

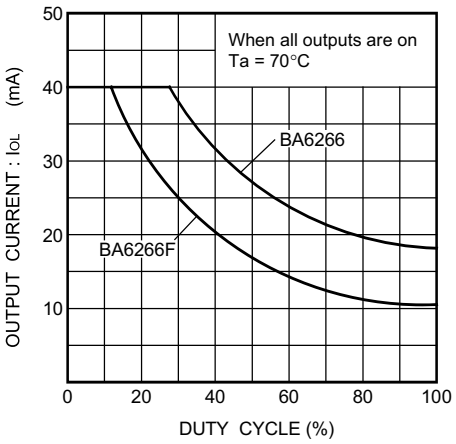
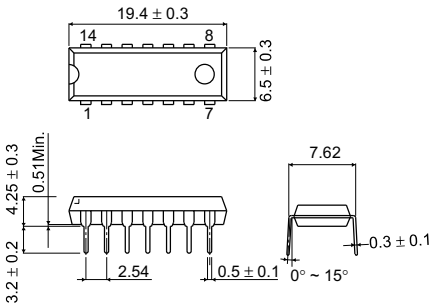


Fig.4 Output conditions diagram

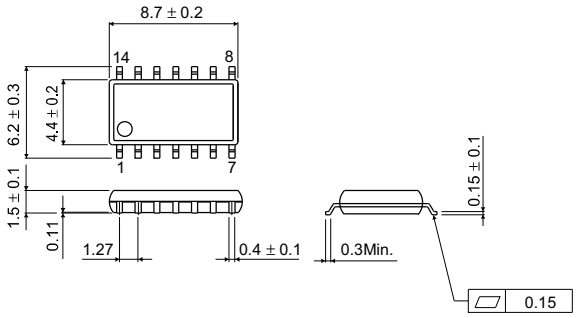
● External dimensions (Units: mm)

BA6266



DIP14

BA6266F



SOP14