

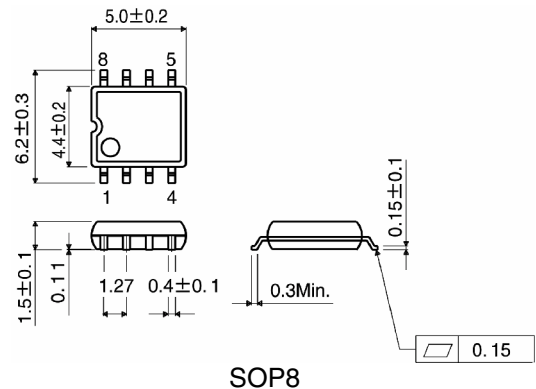
Single phase full-wave driver IC for fan motor

BA6428F

●Description

The BA6428F is a single phase full-wave fan motor driver. It has motor protection functions such as a lock detector, automatic restart, and an output terminal that alarms when the motor is locked. This IC makes sets smaller, due to the compact SOP8 package and the requirement of few external components.

●Dimension (Units : mm)



●Features

- 1) Built-in power Tr
- 2) Lock detector, Automatic restart function
- 3) Built-in thermal shut down
- 4) Alarm output terminal

●Applications

Fan motor

●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	15	V
Power dissipation	P _d	687	mW
Operating temperature range	T _{opr}	-40 ~ +85	°C
Storage temperature range	T _{stg}	-55 ~ +150	°C

Derating: 5.5mW/°C for operation above Ta=25°C.

●Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	V _{CC}	3.0	5.0	14.0	V

● Electrical characteristics (Unless otherwise noted, $T_a=25^\circ\text{C}$, $V_{cc}=5\text{V}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions	
Circuit current	I_{CC}	2.2	4.5	9.0	mA	Output=OFF	
For lock detector	Capacitor charging current	ILDC	1.60	2.90	4.64	μA	VLD=1.1V
	Capacitor discharging current	ILDD	0.24	0.48	0.80	μA	VLD=1.1V
	Capacitor charge/discharge current	rCD	4.5	6.0	10.0	—	rCD=ILDC/ILDD
	Capacitor clamp voltage	VLDCL	1.27	1.93	2.60	V	
	Capacitor comparator voltage	VLDCP	0.47	0.76	1.06	V	
Output L voltage	VOL	—	0.2	0.3	V	$I_o=200\text{mA}$	
Output H voltage	VOH	3.9	4.1	—	V	$I_o=200\text{mA}$	
Alarm output terminal L voltage	VALL	—	0.3	0.5	V	$I_{AL}=5\text{mA}$	
Alarm output terminal leak current	IALL	—	0	50	μA	$V_{AL}=15\text{V}$	

● Block Diagram

