2-phase half-wave motor predriver BA6404F

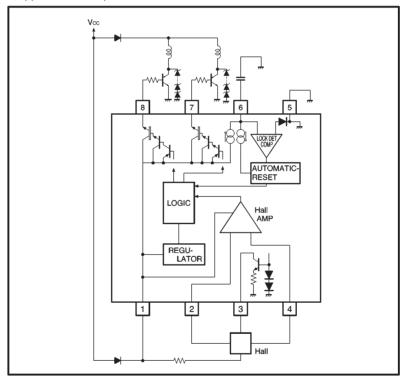
The BA6404F is a 2-phase, half-wave motor predriver suited for fan motors.

Features

- Lock detection and rotational speed sensing mechanisms are built in.
- 2) Hall constant current source is built in.

- 3) Compact 8-pin SOP package reduces the number of external components required.
- 4) Automatic restart when the motor lock is undone.

Block diagram and application example



Motor driver ICs BA6404F

● Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Applied voltage	Vcc	30	V
Power dissipation	Pd	450*	mW
Operating temperature	Topr	−20~+80	ç
Storage temperature	Tstg	−55∼ +125	Ç
Output current	Іомах.	70	mA

^{*} Reduced by 4.5 mW for each increase in Ta of 1°C over 25°C.

●Operating power supply voltage range (Ta = 25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Applied voltage	Vcc	4	_	28	٧	Operate within the allowable power dissipation for -20 °C < Ta < 80 °C
Input voltage *	Vвн	0.8	_	Vcc-0.2	٧	_

^{*} Input voltage range includes the amplitude of signal.

●Electrical characteristics (unless otherwise noted, Ta = 25°C and Vcc = 12V)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Supply current	Icc	_	3.2	5.0	mA	When output is OFF
Hall amplifier input hysteresis (十)	V _{hys} +	3	_	15	mV	Pin2 voltage with respect to pin4 voltage, V _B = 6 V
Hall amplifier input hysteresis (—)	V _{hys} -	-3	_	-15	mV	Pin2 voltage with respect to pin4 voltage, $V_B = 6 \text{ V}$
Pin3 constant current	lз	5	6.8	10	mA	V3pin=Vcc
Pin6 charge current	l _{6c}	4.0	7.7	12	μΑ	V6pin=1.5V
Pin6 discharge current	l _{6d}	0.8	1.45	2.3	μΑ	V6pin=1.5V
Pin6 charge/discharge ratio	r cd	3	5.2	8	_	lec / led
Pin6 clamp voltage	V ₆ CL	2.2	2.6	3.0	V	_
Pin6 comparator voltage	V ₆ CP	0.4	0.6	0.8	V	_
Pin7 Output high level voltage	V ₇ H	10	10.5	_	V	Io=10mA
Pin8 Output high level voltage	Vвн	10	10.5	_	V	Io=10mA

●External dimensions (Units: mm)

