



**Prolific**  
PROLIFIC TECHNOLOGY INC.

DC Brushless Motor Hall Driver IC

# PT3925

## Single coil Hall Driver IC

### Applications

- Single coil DC brushless motor
- Support pre-driver application

### Features

- Built-in hall sensor
- Single phase full wave driver
- Soft switching output driver
- Motor locked protection and automatic restart
- RD output
- Built-in hysteresis comparator
- Built-in zener diode
- High balance and low thermal drift magnetic sensing
- Low power consumption and high driving efficiency
- 8KV ESD capability

### Specifications

#### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Conditions	Rating	Units
Maximum supply voltage	VDDmax		17	V
Maximum RD output voltage	V <sub>RDmax</sub>		17	V
Maximum RD output current	I <sub>RDmax</sub>		25	mA
Allowable power dissipation	Pd		500 <sup>*1</sup>	mW
Operating temperature	Ta		-40~+100	°C
Storage temperature	Ts		-50~+150	°C
Max. output current	Peak		1000	mA
	Hold	0.5sec	800 <sup>*2</sup>	mA
Junction Temperature	Tj		150	°C
Thermal resistance	R <sub>aj</sub>		250	°C/W
Back Electromotive Force	B-EMF	Output high voltage minus VDD	0.65	V

<sup>\*1</sup>: Reduced by 4.0mW for each increase in Ta of 1°C over 25°C When mounted on 50mm x 50mm x 1.6mm glass epoxy board

<sup>\*2</sup>: Should not exceed Pd

### Package: TSOT25F-5pin

