



**Prolific**  
PROLIFIC TECHNOLOGY INC.

DC Brushless Motor Driver IC

**PL392S**

Single Coil Smart Motor Driver IC  
with PWM speed control

### Applications

- Single coil DC brushless motor

### Features

- Built-in high sensitivity hall sensor
- Single phase full wave driver
- Soft switching output driving
- Lead angle adjustment
- Speed controllable by DC voltage / direct PWM
- Minimum speed setting
- Torque up start
- Quick start
- Locked protection and automatic restart
- Current limit protection
- Thermal protection
- FG open drain output
- Built-in Zener diode
- High balance and low thermal drift magnetic sensing
- Low power consumption and high driving efficiency
- RoHS 2.0 compliance

### Package:

**DFN-10 (3x3x0.75mm)**



### Specifications

#### Absolute Maximum Ratings

Parameter	Symbol	Conditions	Rating	Units
Maximum supply voltage	VDDmax		20	V
Allowable power dissipation	Pd	DFN-10	1860	mW
Operating temperature	Ta		-40~+105	°C
Storage temperature	Ts		-50~+150	°C
Max. output current(O1, O2)	I <sub>OUTMAX</sub>	0.5sec	1500 <sup>1</sup>	mA
Max. output voltage(O1, O2, FG)	V <sub>OUTMAX</sub>		20	V
Max. FG output current	I <sub>FGMAX</sub>		10	mA
Max. input voltage(PWM, VL, LA)	V <sub>INMAX</sub>		6	V
V <sub>REF</sub> output current	I <sub>VREF</sub>		5	mA
Junction Temperature	T <sub>j</sub>		150	°C

<sup>1</sup>: Should not exceed Pd