



DC Brushless Motor Driver IC

PL393V-A

**24V Single-phase Motor Driver
with PWM speed control**

Applications

- Automotive cooling fan

Features

- Built-in hall sensor
- Single phase full wave driver
- Linear Soft switching output driver
- Motor locked protection and automatic restart
- Speed controllable by DC voltage/PWM
- Minimum speed setting
- Quick start
- FG/RD output
- Current limit protection
- Thermal protection
- Built-in zener diode
- High balance and low thermal drift magnetic sensing
- Low power consumption and high driving efficiency
- Jump start protection
- AEC Q100 qualified

Package:

SOP-10F (4.9x3.9x1.4mm)



DFN-10 (3x3x0.55mm)



Specifications

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Conditions	Rating	Units
Maximum supply voltage	VDDmax	10u sec	42	V
Allowable power dissipation	Pd	SOP10F	833	mW
		DFN10	1860	mW
Operating temperature range	Ta		-40~+105	°C
Storage temperature	Ts		-50~+150	°C
Max. output current	I _{OMAX}	0.5sec	1200 ¹	mA
Max. FG/RD output voltage	V _{FG/RDMAX}		36	V
Max. FG/RD output current	I _{FG/RDMAX}		10	mA
Max. input voltage (PWM,VL,VSEN)	V _{INMAX}		6	V
VREF driving capability	I _{VREF}		5	mA

¹: Should not exceed Pd