

Single-Phase Full-Wave Pre Driver for Fan Motor

DESCRIPTION

EUM6167 is a pre-driver for single coil brushless DC motor. With an external PWM input signal, EUM6167 can control the speed of DC motor. It is an interface between a HALL IC and a single coil motor. The functions built in EUM6167 include PWM control mode, minimum speed mode, soft-switching time, fan tachometer, lock protection, auto restart, Hall Bias and current limiter.

PWM mode controls the external PMOS-NMOS FET in low noise and low vibration. Minimum speed mode makes the lowest speed of motor settable. Soft-switching time can cut the ineffective current when phase change is not set. If the motor is stalled by external force or obstacles, overdrive current may incur coil overheating. To prevent this, the lock protection circuit shuts down the external power devices for a few seconds after the motor is locked. Then auto restart circuit will resume to power up these devices. The protection and power up time are settable by external capacitor. EUM6167 has FG output and RD output.

FEATURES

- Single-phase Pre Driver
- PWM Control Mode
- Soft-Switching
- Built in Hall Bias
- Minimum Speed Settable
- Current Limiter
- Lock Protection and Auto Restart
- FG and RD Output
- 12V/24V/48V Power Supplies Applicable
- Available in TSSOP-20 Package
- RoHS Compliant and 100% Lead (Pb)-Free

APPLICATIONS

- PC/Server FAN Motor

Application Circuit

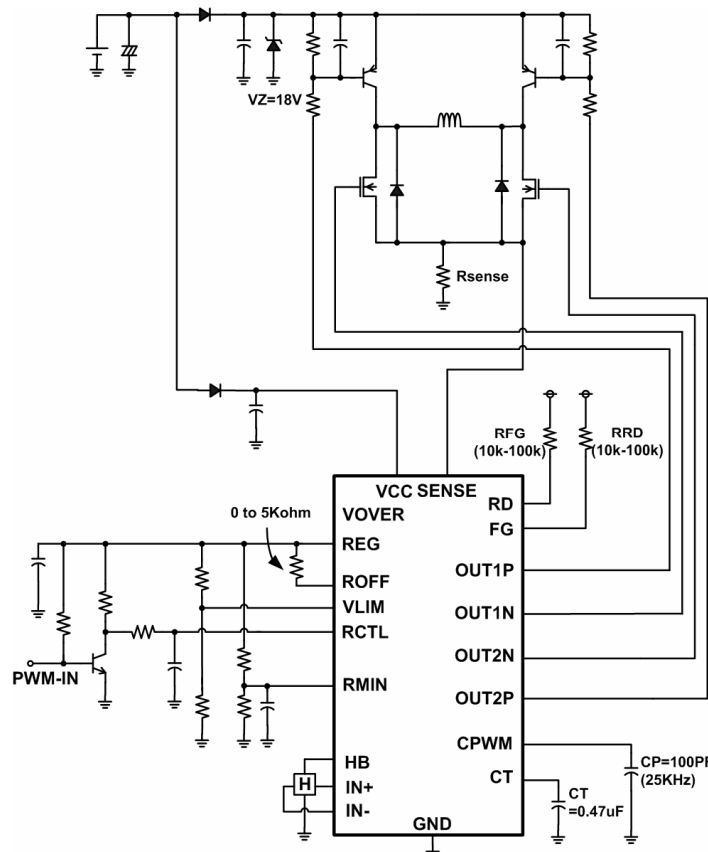


Figure 1. 12V Application Circuit