

## 2.3A +9V TO 60V PWM SOLENOID VALVE DRIVER USING DRV101

The DRV101 is a low-side power switch employing a pulse-width modulated (PWM) output. Its rugged design is optimized for driving electromechanical devices such as valves, solenoids, relays, actuators, and positioners. The DRV101 module is also ideal for driving thermal devices such as heaters and lamps. PWM operation conserves power and reduces heat rise, resulting in higher reliability. In addition, adjustable PWM potentiometer allows fine control of the power delivered to the load. Time from dc output to PWM output is externally adjustable. The DRV101 can be set to provide a strong initial closure, automatically switching to a soft hold mode for power savings. Duty cycle can be controlled by a potentiometer, analog voltage, or digital-to-analog converter for versatility. A flag output LED D2 indicates thermal shutdown and over/under current limit. A wide supply range allows use with a variety of actuators.

## **FEATURES**

- HIGH OUTPUT DRIVE: 2.3A
- WIDE SUPPLY RANGE: +9V to +60V
- **COMPLETE FUNCTION**
- **PWM Output**
- Internal 24 kHz Oscillator
- Digital Control Input
- Adjustable Delay (Capacitor C1)
- Adjustable Duty Cycle P1 Potentiometer
- Over/Under Current Indicator
- **FULLY PROTECTED**
- Thermal Shutdown with Indicator
- Internal Current Limit

## **APPLICATIONS**

- **ELECTROMECHANICAL DRIVERS:**
- Solenoids Positioners
- Actuators High Power Relays/Contactors
- Valves Clutch/Brake
- FLUID AND GAS FLOW SYSTEMS
- INDUSTRIAL CONTROL
- **FACTORY AUTOMATION**
- PART HANDLERS



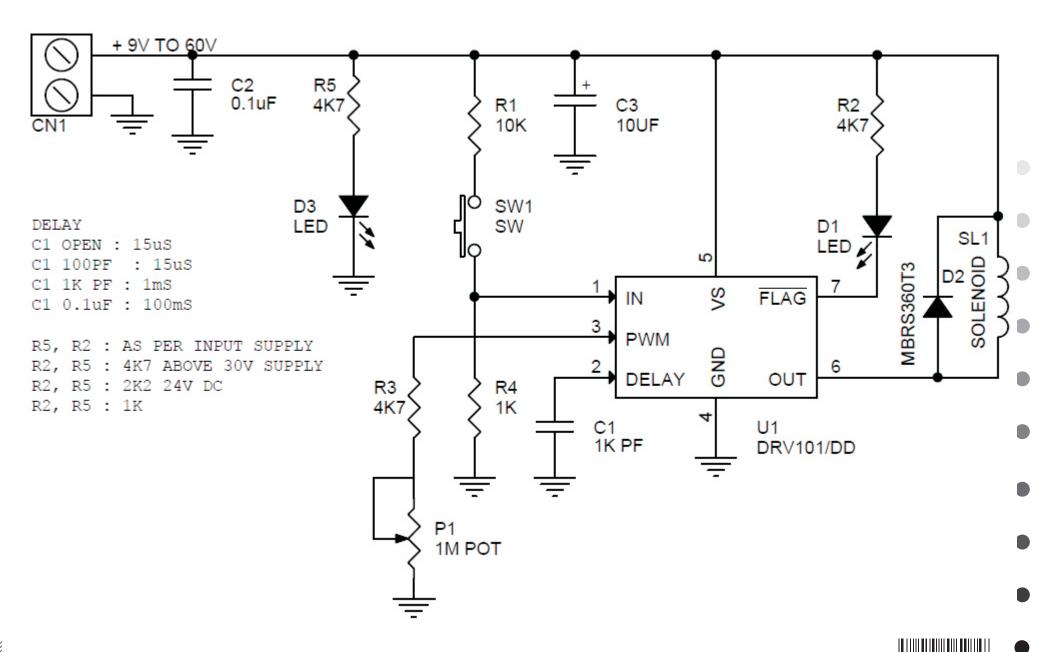










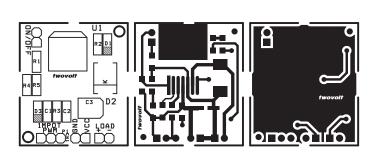












BOM			
SR.	QNTY.	REF.	DESC.
1	1	CN1	2 PIN HEADER CONNECTOR
2	1	C1	1K PF
3	1	C2	0.1uF
4	1	C3	10UF
5	2	D1,D3	LED SMD 1206
6	1	D2	MBRS360T3 ON SEMI
7	1	P1	3 PIN HEADER FOR 1M POTENTIOMETER
8	1	R1	10K SMD 1206
9	3	R2,R3,R5	4K7 SMD 1206
10	1	R4	1K SMD 1206
11	1	SL1	SOLENOID
12	1	SW1	2 PIN HEADER & CLOSURE
13	1	U1	DRV101/DD SMD









