

## MPWM100-50 Large power PWMA

### 1 Features

- Customer Design
- Wide input voltage: 16V~100V
- Bipolar ( $\pm 10V$ ) Analog DC signal input
- Max continuous input current 50A
- The product includes a current limiting circuit
- Work in the rated power without the need for external radiator



### 2 Applications

- DC motor drive control
- Drive the reactive load

### 3 Descriptions

MPWM100-50 is a switching mode PWMA. It can provide 5KW maximum load power for the load; the product needs two power supplies, +15V is for the small signal control circuit power supply; 16V-100V is the motor power supply for the internal H bridge; input circuit control signal is the bipolar analog DC input ( $\pm 10V$ ) signal; Output pulse square wave signal frequency is 2KHz. When the output current is greater than 50A, the circuit will close the four power driving tubes of the H bridge circuit to make the product into the protection state. The circuit can back to work normally again until restart-up.

MPWM100-50 PWMA has excellent structural design to ensure the product's dissipation power can be better passed to the shell without the need for external cooling device under the rated power conditions. Easy to use and easy to install. The connection between the product and system is through the connection socket only without any external components.

## 4 Technical Specifications

Form 1 Electrical characteristics

Absolute Maximum Ratings	Recommended working conditions
Supply voltage +Vs: +120V Supply voltage +Vcc: 16V Internal power loss : 380W ( Total power consumption of two tubes ) Storage temperature: -55°C~105°C Operating temperature (Tc) : -40°C~85°C Input voltage +PWM: ±10V	Supply voltage +Vs : 16V~100V Supply voltage +Vcc: 15V Input voltage +PWM: ±2V

## 5 Lead function description

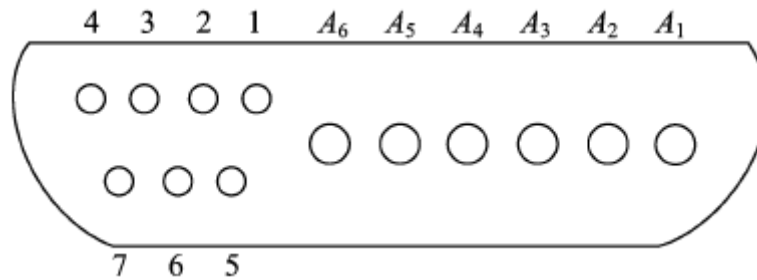


Fig 2 Bottom view

Form 3 Lead description

No.	Symbol	Function	No.	Symbol	Function
1	1	Control signal	8	A1	+100v
2	2	Ground	9	A2	Power ground
3	3	+15V	10	A3	Output 1
4	4	NC	11	A4	Output 2
5	5	Control signal	12	A5	Current protect threshold
6	6	+15V ground	13	A6	NC
		Function detection signal terminal A			

7	7	Function detection signal terminal B			
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## 6 Circuit block diagram

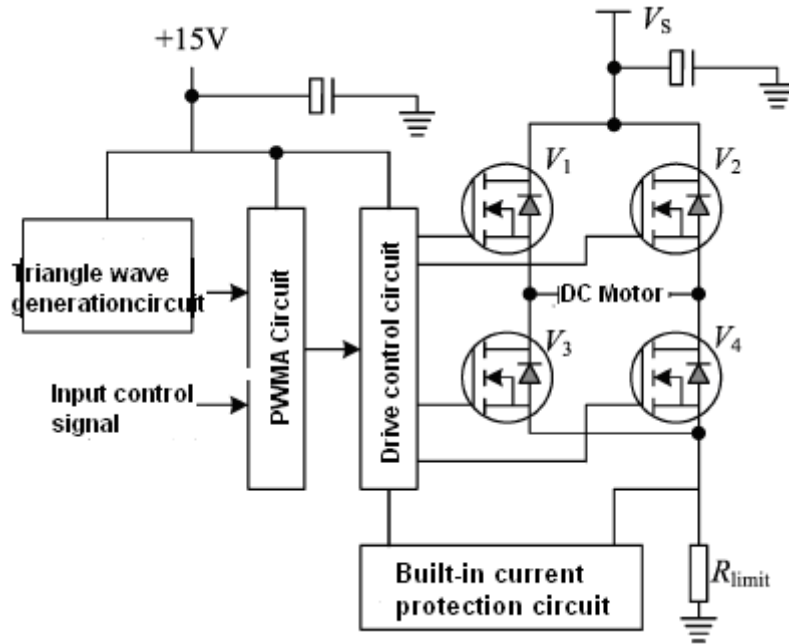
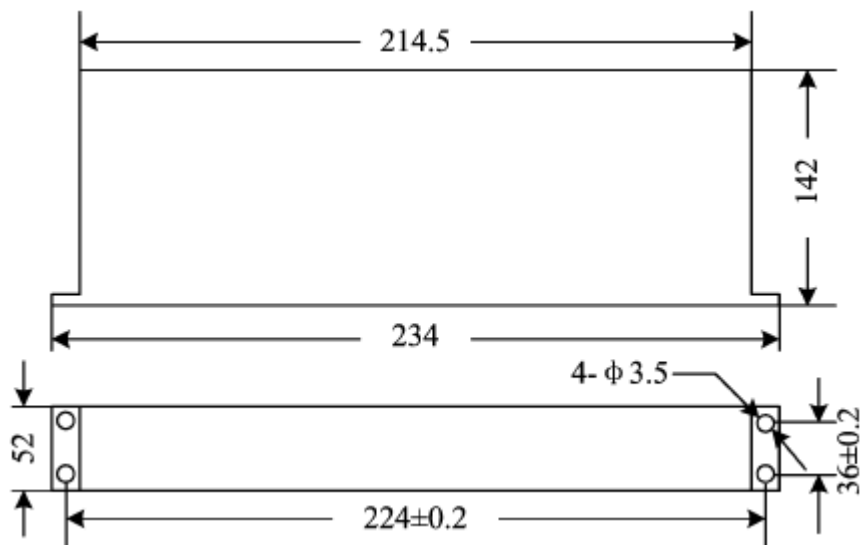


Fig 3 Circuit block diagram

## 7. Typical Connection Diagram



Application notes please refer to the appendix, must read it carefully