

MPWM100-50/1 Large power Large Current PWMA

1 Features of MPWM100-50/1 Large power Large Current PWMA

- Customer Design
- Wide input voltage: 16V~100V
- $\pm 10V$ 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 of MPWM100-50/1 Large power Large Current PWMA

- DC motor drive control
- Drive the reactive load

3 Descriptions of MPWM100-50/1 Large power Large Current PWMA

MPWM100-50/1 is a switching mode PWMA, It can provide 5KW maximum load power for the load; the product needs two power supplies, +15V for the small signal control circuit power supply; 16V-100V motor power supply for the internal H bridge; input circuit control signal for the bipolar analog DC input ($\pm 10V$) flat signal; Output pulse square wave signal frequency 0.9KHz~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.

MPWM100-50/1 PWMA using excellent structural design to ensure the rated power conditions within the product dissipation power can be better passed to the shell without the need for external cooling device, easy to use and easy to install. The connection of the product and system only needs to be done through the connection socket, without any external components.

4 Technical Specifications of MPWM100-50/1 Large power

Large Current PWMA

Form 1 Electrical characteristics

Absolute Maximum Ratings	Recommended working conditions
Supply voltage +Vs: +100V 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 of MPWM100-50/1 Large power

Large Current PWMA

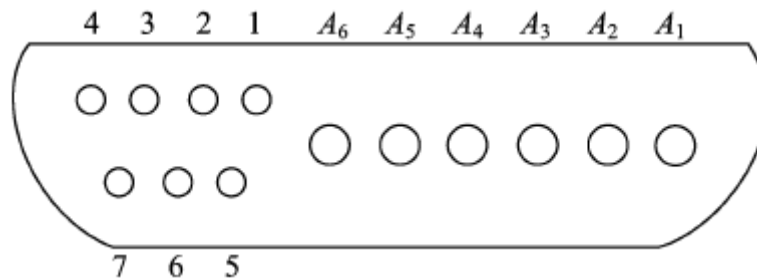


Fig 2 Bottom view

Form 3 Lead description

No.	Symbol	Function	No.	Symbol	Function
A1	V _s	Power voltage	2	V _{cc}	Power voltage
A2	GND ₀	Output Ground	3	NC	NC

A3	OUT ₁	Output terminal 1	4	V _i	Input control signal terminal
A4	OUT ₂	Output terminal 2	5	GND _i	Input ground
A5	V _{SHT}	OFF terminal	6	JA	Load current sensing terminal
A6	NC	NC	7	JB	Load current sensing terminal B
1	GND _i	Input ground			

6 Circuit block diagram of MPWM100-50/1 Large power Large Current PWMA

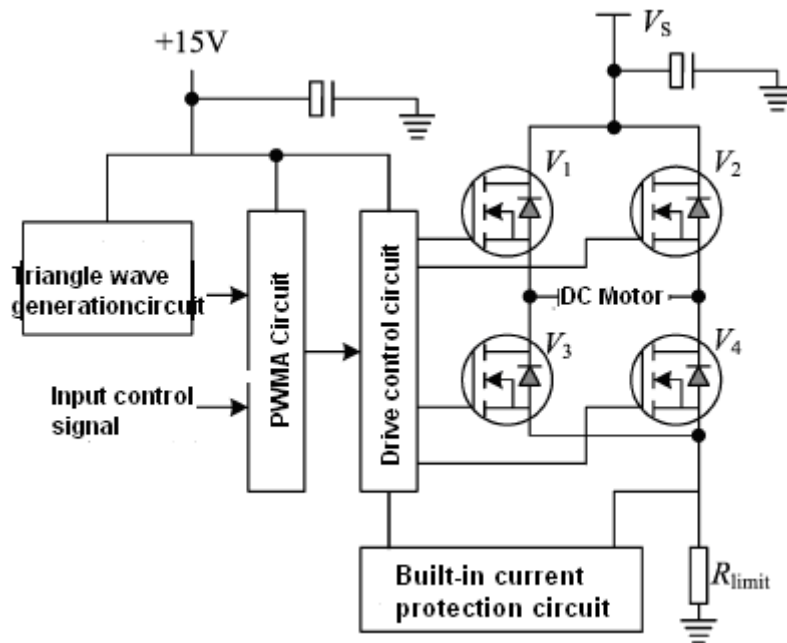


Fig 3 Circuit block diagram

7. Typical Connection Diagram of MPWM100-50/1 Large power Large Current PWMA

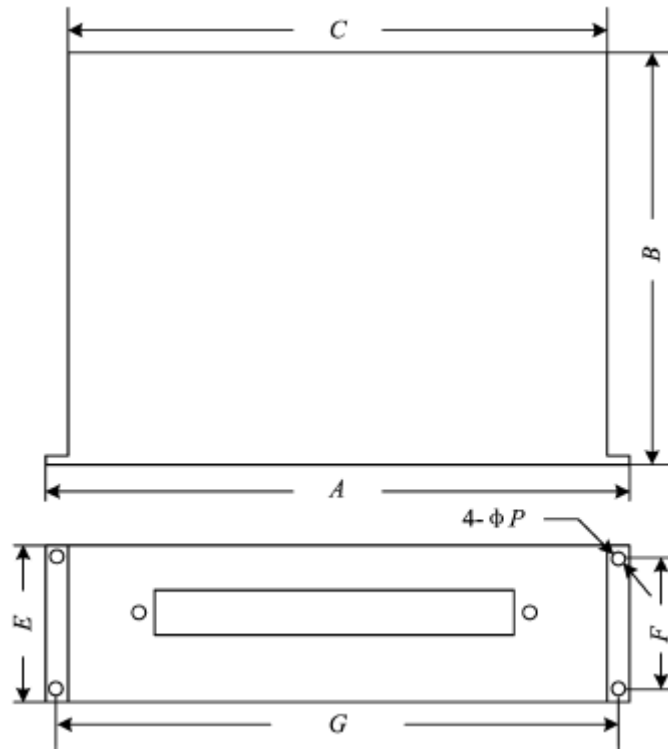


Fig 4

Form 4 Package Outline

Symbol	Value /mm		
	Min	Typical	Max
A	-	-	111.0
B	-	-	99.0
C	89.5	-	91.5
ϕP	3.0	-	4.0
E	-	-	53.0
F	35.5	-	36.5
G	99.5	-	100.5

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