

## HPA2810 Isolated Pulse Width Modulation Amplifier

### 1 Features

- TTL Square wave signal
- Isolated between the input signal and output signal
- Continuous output current: 30A
- Inhibit function
- Wide range supply voltage: 16V-80V



58.65×41.4×7.2mm<sup>3</sup>

Weight: 54g

### 2 Scope of application

- DC motor drive control
- Drive the reactive load

### 3 Descriptions

HPA2810 is Isolated Pulse Width Modulation Amplifier(PWMA), Input TTL square wave; Product design and manufacturing to meet the MIL-STD and detailed specifications of the product requirements, the quality level is H-class

### 4 Technical Specifications

Form 1: Rated conditions and Recommended operating conditions

Supply voltage: $V_{CC}:12V, V_S:28V(Q)$	Efficiency: $\geq 95\%$
Input signal: TTL square wave	Inhibit function
Continuous output current: $\leq 10A$	Operating Temperature: $-55^{\circ}C \sim 125^{\circ}C$
Static current: $\leq 70mA$	Metal package, Size $\leq 58.65 \times 41.4 \times 7.2mm^3$

### 5 Lead function descriptions

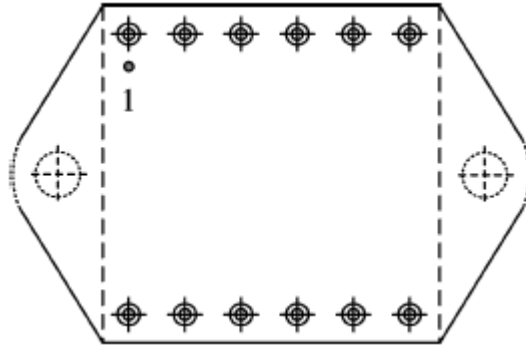


Fig 2 upward view

Form 3 Pin Designation

No	symbol	Designation	No	symbol	Designation
1	+V <sub>cc</sub>	V <sub>cc</sub> control supply	7	I <sub>SNESEA</sub>	Current sensing terminal A
2	GND (IN)	Input signal Ground	8	OUTB	Output B
3	TTL	TTL input square Wave	9	+VS	Motor supply
4	DIS	Inhibit input	10	NC	NC
5	GND	Output Ground	11	OUTA	Output B
6	NC	NC	12	I <sub>SENSEB</sub>	Current sensing terminal B

## 6 Circuit principle frame diagram

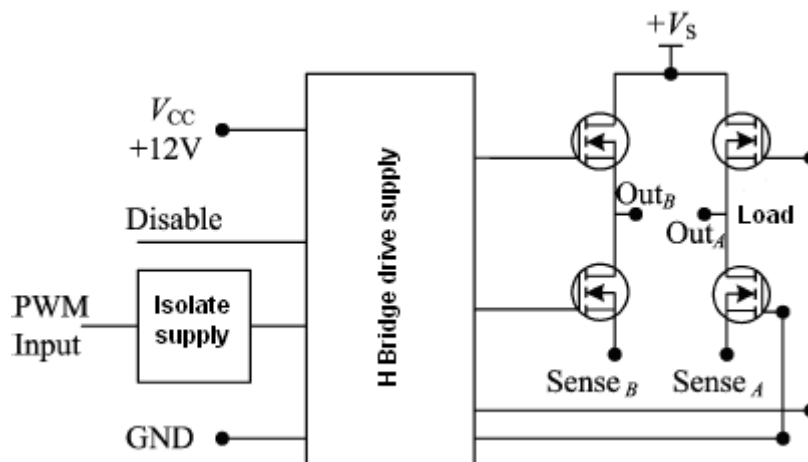


Fig 3 Circuit principle frame diagram

## 7. Typical Connection Diagram

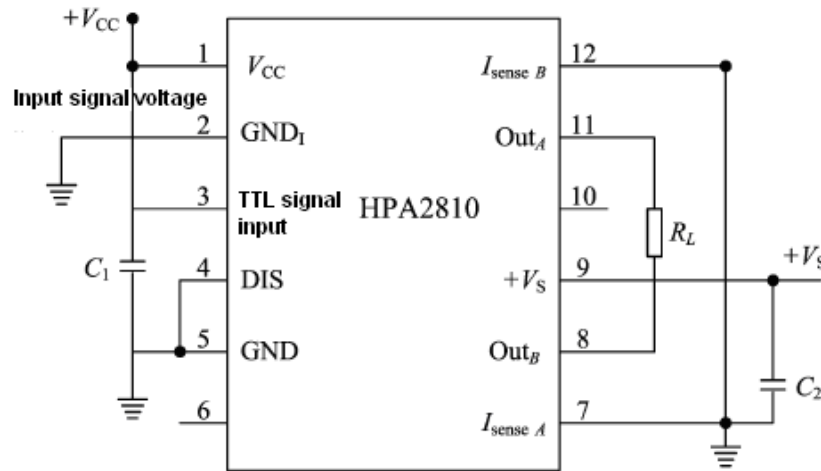


Fig 4 HPA2810 Typical connection Diagram

Notes: (1) Signal source is square wave which frequency  $\leq 22\text{KHZ}$ ,  $0\text{V}\sim 5\text{V}$ ; (2) C1 include  $22\ \mu\text{F}/50\text{V}$  Tantalum capacitor and  $0.1\ \mu\text{F}$  ceramic capacitor in parallel, Capacitance withstand voltage is  $50\text{V}$ ; (3) C2 include  $100\ \mu\text{F}/100\text{V}$  Tantalum capacitors and  $0.1\ \mu\text{F}$  ceramic capacitors in parallel, Capacitance withstand voltage is  $100\text{V}$ .

## 8. Package Specifications

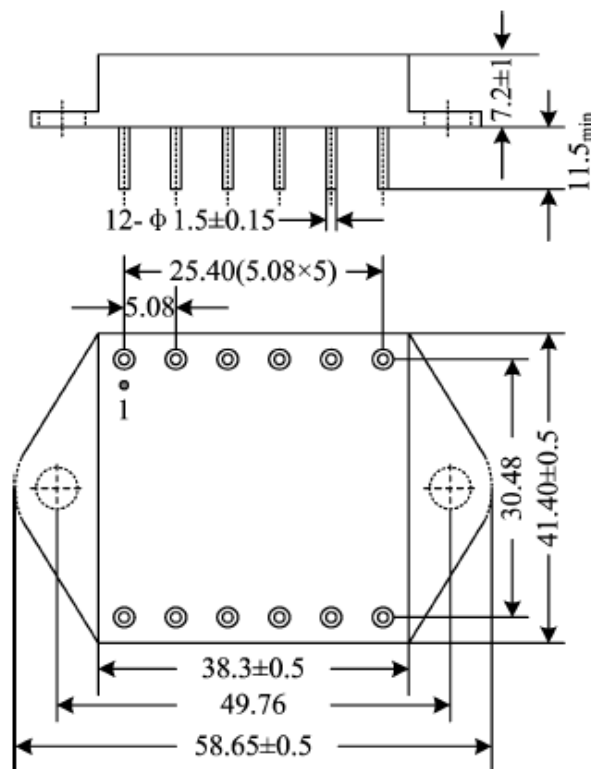


Fig 5 upward view



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Notes: Dimensional tolerances not shown in the Fig:  $\pm 0.5\text{mm}$  Unit: mm

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