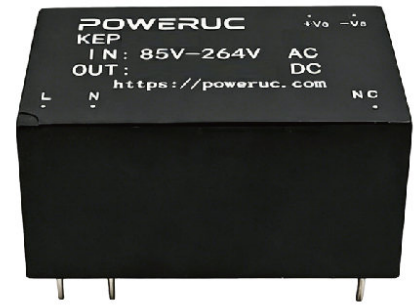


## KEP05 Series 5 W AC/DC Power Module



### Product Overview

The KEP05 Series is a miniature AC/DC power module that efficiently converts AC or DC input power into a stable DC output. With high efficiency, compact size and low weight, it is suitable for LED systems, streetlight control, industrial equipment, office equipment and civil applications.

Feature	Description
Universal AC/DC input	85-264 VAC input; also supports 100-370 VDC input
Compact 5 W module	Miniature PCB-mount package for embedded equipment
Industrial operating range	-40°C to +70°C operating temperature
Integrated output protection	Short-circuit, overload and overvoltage protection
Flame retardancy	UL94-V0 compliant material rating

### General Specifications

Item	Specification
Output power	5 W
Input type	AC or DC input
Flame retardancy	UL94-V0
Operating temperature	-40°C to +70°C
Insulation class	Class B
Dielectric strength	4 kV AC, 50 Hz, 1 min, 5 mA (input/output)
Output protection	Short-circuit, overload and overvoltage protection

### Input Characteristics

Parameter	Specification
AC input range	85-264 VAC
DC input range	100-370 VDC
Frequency	47-63 Hz
Input current	70 mA @ 230 VAC input
External fuse	1 A / 250 V slow-blow, required
Hot-swap	Not supported

### Output Characteristics

Parameter	Specification
Output voltage accuracy	3.3 V: $\pm 3\%$ ; other models: $\pm 2\%$
Ripple and noise	50 mV typical
Short-circuit protection	Continuous short-circuit protection, self-recovery
Overload protection	$\geq 120\%$ rated output, self-recovery
Overvoltage protection	3.3 V / 5 V: $\leq 7.5$ V; 9 V: $\leq 15$ V; 12 V / 15 V: $\leq 20$ V; 24 V: $\leq 30$ V
Hold-up time	50 ms

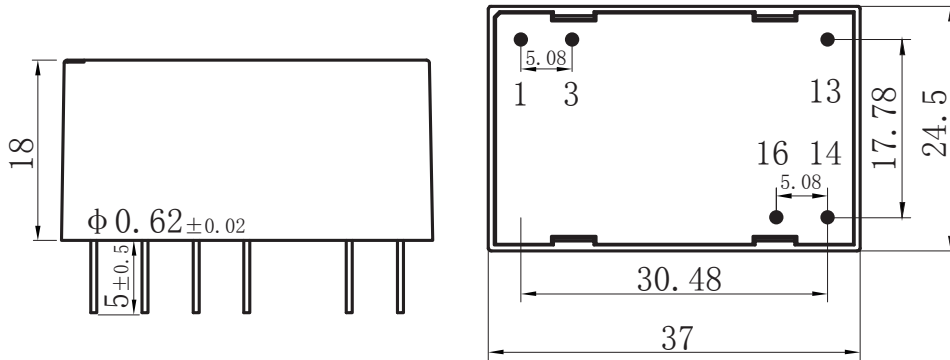
### Model Selection

Model	Power	Input voltage	Output voltage / current
KEP05D3V3	5 W	85-264 VAC or 100-370 VDC	Single output: 3.3 V / 1.51 A
KEP05D05	5 W	85-264 VAC or 100-370 VDC	Single output: 5 V / 1 A
KEP05D09	5 W	85-264 VAC or 100-370 VDC	Single output: 9 V / 555 mA
KEP05D12	5 W	85-264 VAC or 100-370 VDC	Single output: 12 V / 416 mA
KEP05D15	5 W	85-264 VAC or 100-370 VDC	Single output: 15 V / 333 mA
KEP05D24	5 W	85-264 VAC or 100-370 VDC	Single output: 24 V / 208 mA

Model code note: D = single output; S = dual output.

### Mechanical Dimensions and Pin Assignment

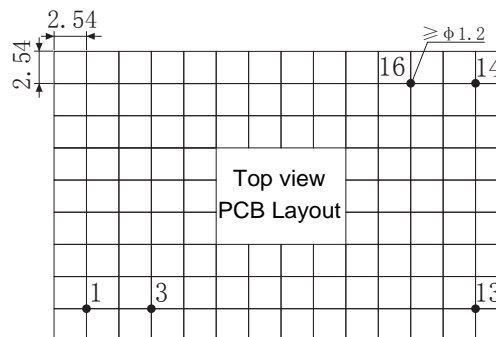
Dimensions are in millimeters unless otherwise specified. Recommended PCB layout is shown from the top view.



Front view and bottom view

### Pin Assignment

Pin	Function
1	AC (L)
3	AC (N)
13	N.C.
14	-V
16	+V



Top-view PCB layout