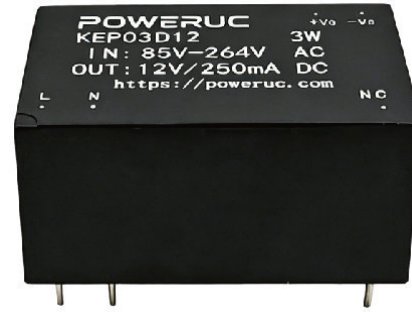


KEP03 Series 3 W AC/DC Power Module



Product Overview

The KEP03 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 3 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	3 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	45 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	$\geq 150\%$ rated output, self-recovery
Overvoltage protection	3.3 V / 5 V: ≤ 7.5 V; 9 V: ≤ 15 V; 12 V / 15 V: ≤ 20 V; 24 V: ≤ 30 V
Hold-up time	60 ms

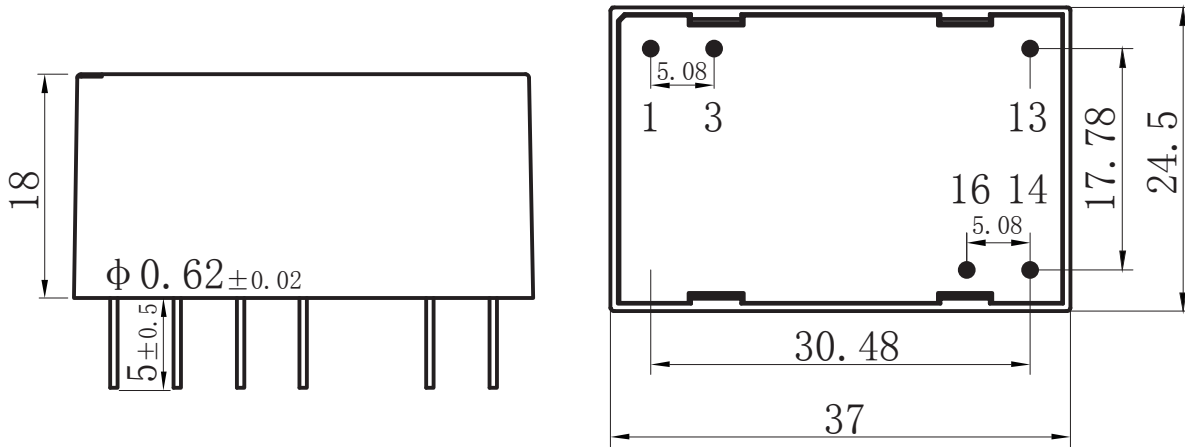
Model Selection

Model	Power	Input voltage	Output voltage / current
KEP03D3V3	3 W	85-264 VAC or 100-370 VDC	Single output: 3.3 V / 909 mA
KEP03D05	3 W	85-264 VAC or 100-370 VDC	Single output: 5 V / 600 mA
KEP03D09	3 W	85-264 VAC or 100-370 VDC	Single output: 9 V / 333 mA
KEP03D12	3 W	85-264 VAC or 100-370 VDC	Single output: 12 V / 250 mA
KEP03D15	3 W	85-264 VAC or 100-370 VDC	Single output: 15 V / 200 mA
KEP03D24	3 W	85-264 VAC or 100-370 VDC	Single output: 24 V / 125 mA

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

Mechanical Dimensions and Pin Assignment

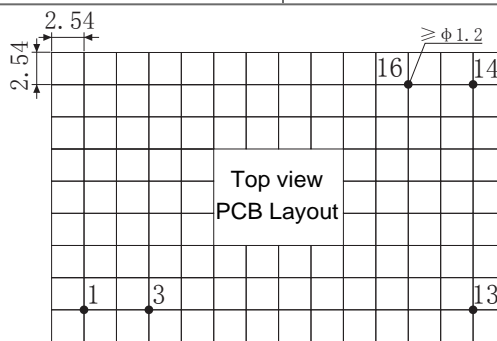
Dimensions are in millimeters unless otherwise specified. Recommended PCB layout is shown from the top view.



Front view and bottom view

Pin Assignment

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



Top-view PCB layout
Top-view PCB layout