



# KB10

## 10 Watt Single and Dual Output, PCB Mountable AC/DC Switching Power Supply



### FEATURES

- ✔ **PC BOARD MOUNTABLE**
- ✔ **SUPER SMALL SIZE**
- ✔ **HIGH POWER DENSITY**
- ✔ **UNIVERSAL INPUT / "CE-MARK"**
- ✔ **HIGH RELIABILITY**
- ✔ **OVERCURRENT PROTECTION**
- ✔ **TWO YEAR WARRANTY**

### SAFETIES / EMI



FCC Part 15-B  
EN 55022-B

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load.

### INPUT SPECIFICATIONS

Input Voltage.....	AC 85V-264V
Input Frequency.....	47-63 Hz
Input Current.....	V <sub>in</sub> = 115v 0.18A
	V <sub>in</sub> = 230v 0.12A
Inrush Current.....	V <sub>in</sub> = 100v 3.2A
	V <sub>in</sub> = 230v 7.5A

### OUTPUT SPECIFICATIONS

Output Voltage.....	See Chart
Output Adjustment.....	No Adjustment
Efficiency.....	75~80%
Over-Voltage Protection.....	N/A
Over-Current Protection.....	Automatic Recovery (105% min)
Ripple and Noise.....	150 mVp-p (typ.)
Hold-Up Time.....	V <sub>in</sub> = 100v 11mSec
	V <sub>in</sub> = 230v 90mSec
Line/Load Regulation.....	0.4% / 1% (MAX)
Rise Time.....	V <sub>in</sub> = 100v 130mSec
	V <sub>in</sub> = 230v 115mSec
Leakage Current.....	V <sub>in</sub> = 100v 0.12 m Arms
	V <sub>in</sub> = 230v 0.26 m Arms

### GENERAL SPECIFICATIONS

Switching Frequency.....	100 KHz Typ
MTBF.....	>280,000 Hours Typ
Isolation Voltage	
Primary to Secondary.....	3000 VAC
Primary to Case.....	1500 VAC
Secondary to Case.....	500 VAC
Isolation Resistance.....	100 MΩ

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....	0°C ~ +60°C
	Derates linearly 2.5%/°C after 50°C
Cooling.....	Convection
Temperature Coefficient.....	0.02% / °C
Humidity.....	20~85% Rh
Storage Temperature.....	-20° ~ +85°C
Shock/Vibration.....	Shock: 20G (3 Directions each 3 times)
	Vibration: 1~55Hz

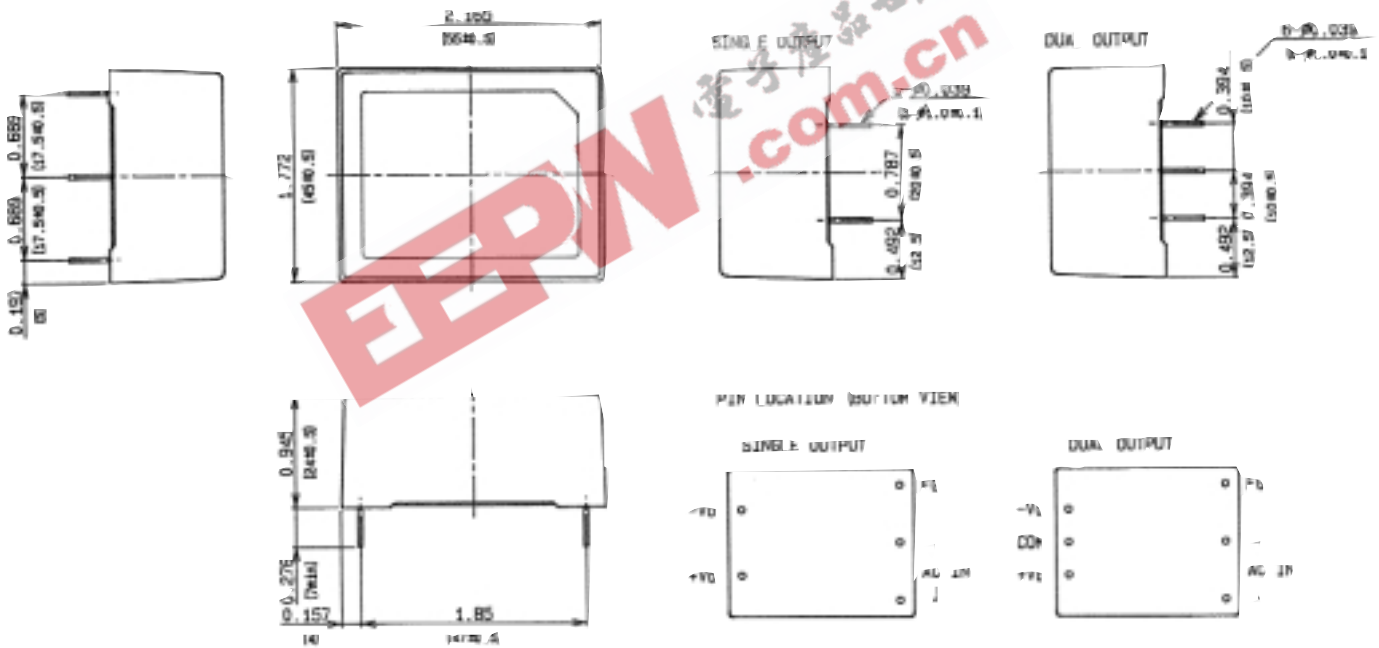
### PHYSICAL SPECIFICATIONS

Board Level Encapsulated  
Thru-hole Pins

# Series

MODEL	INPUT RATING	OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY AT 100% LOAD (TYP.)
<b>KB10-05S</b>	115-230 V 50-60 HZ	5 VDC	0 ~ 2.0 A	75%
<b>KB10-12S</b>	115-230 V 50-60 HZ	12 VDC	0 ~ 0.9 A	80%
<b>KB10-15S</b>	115-230 V 50-60 HZ	15 VDC	0 ~ 0.7 A	80%
<b>KB10-24S</b>	115-230 V 50-60 HZ	24 VDC	0 ~ 450 mA	80%
<b>KB10-122D</b>	115-230 V 50-60 HZ	± 12 VDC	±45 ~ 450 mA	80%
<b>KB10-153D</b>	115-230 V 50-60 HZ	± 15 VDC	±35 ~ 350 mA	80%

## KB10 Series



NOTE  
 1. TOLERANCE ±0.05mm.  
 A. DIMENSION IN [INCH (mm)]

**NOTE:**  
 All specifications typical and nominal / full load and 25°C unless otherwise noted.  
 Avoid sustained operation in overload or dead short conditions.  
 Specifications subject to changes without notice.

• Dimensions in mm

