



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



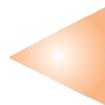
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# SP50U

## 50 WATT, Universal Input Fully Enclosed Switching Power Supply



### FEATURES

- ✔ UNIVERSAL INPUT (AC85-264V)
- ✔ BUILT-IN OVERVOLTAGE PROTECTION
- ✔ OVERCURRENT PROTECTION
- ✔ LIGHTWEIGHT CONSTRUCTION
- ✔ METAL CHASSIS WITH COVER
- ✔ COMPACT, LOW-PROFILE PACKAGES
- ✔ 3 YEAR WARRANTY

### SAFETIES / EMI






 FCC-B  
 EN 55022-B  
 VCCI-II

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load.

### INPUT SPECIFICATIONS

Input Voltage.....	AC 85V-264V DC 110V-340V
Input Frequency.....	47 ~ 63 Hz
Input Current.....	0.52 ~ 1.2A
Inrush Current (100/230VAC cold start) .....	16 ~ 45A

### OUTPUT SPECIFICATIONS

Output Voltage.....	See Chart
Output Adjustment.....	± 10%
Efficiency.....	70 ~ 79%
Over-Voltage Protection.....	Zener Limiter
Over-Current Protection.....	Automatic Recovery (105% min)
Ripple and Noise.....	150 mVp-p max.
Hold-Up Time.....	20-210 mS typ
Line/Load Regulation.....	See Chart
Rise Time.....	100 mS max.
Leakage Current (100/230VAC).....	Vin= 100V            0.5mA max. Vin= 230V            0.75mA max.

### GENERAL SPECIFICATIONS

MTBF @ 50°C .....	>184,000 Hours
Isolation Voltage	
Primary to Secondary.....	3000VAC
Primary to Case.....	1500VAC.
Secondary to Case.....	500VAC.
Isolation Resistance.....	100-Mohms min.

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....	0°-60°C Derates linearly 2.5%/°C after 50°C
Cooling.....	Convection
Temperature Coefficient.....	0.02% / °C
Humidity.....	20-85% Rh (non-condensing)
Storage Temperature.....	-20°C -- 85°C
Shock Vibration.....	Shock: 20G (3 directions each 3 times) Vibration: 10 ~ 55Hz

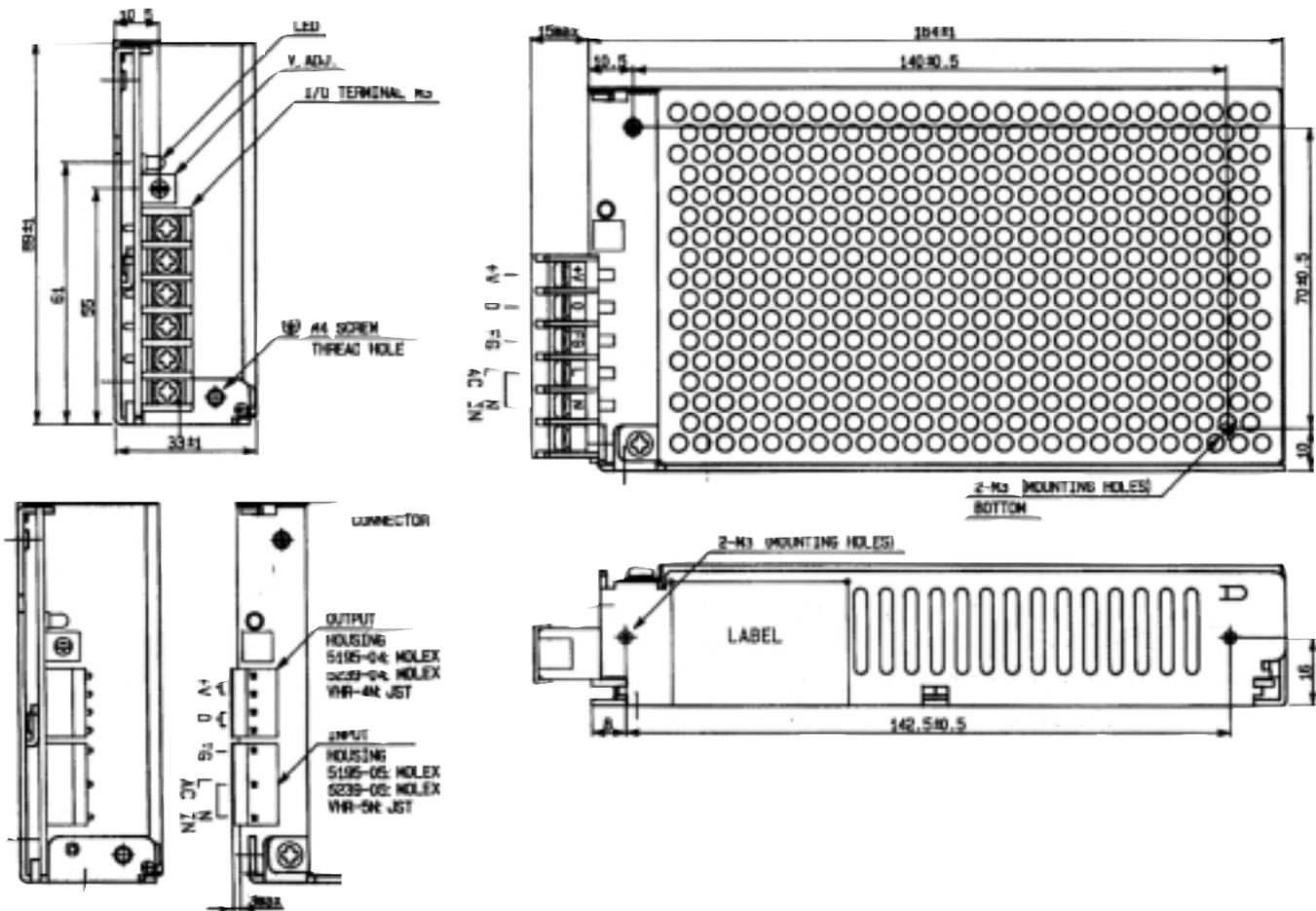
### PHYSICAL SPECIFICATIONS

Metal Enclosed - Terminal Block

# Series

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT		EFFICIENCY	LINE REGULATION	LOAD REGULATION
		@100V	@230V			
<b>SP50U-03S</b>	3.3 VDC	10.0 A	12.0 A	70%	20 mV max.	60 mV max.
<b>SP50U-05S</b>	5 VDC	10.0 A	12.0 A	72%	20 mV max.	60 mV max.
<b>SP50U-12S</b>	12 VDC	4.6 A	5.5 A	77%	20 mV max.	60 mV max.
<b>SP50U-15S</b>	15 VDC	3.7 A	4.4 A	77%	20 mV max.	60 mV max.
<b>SP50U-24S</b>	24 VDC	2.3 A	2.5 A	78%	30 mV max.	120 mV max.
<b>SP50U-48S</b>	48 VDC	1.2 A	1.4 A	78%	50 mV max.	180 mV max.

## SP50U



**NOTE:**

All specifications typical and nominal / full load and 25°C unless otherwise noted. Mounting screw length should not exceed 0.31 inches or 8 mm. Avoid sustained operation in overload or dead short conditions. Specifications subject to changes without notice.

- No. 6-32 mounting holes standard
- Dimensions in mm
- Terminal block or "pin" type connector available