



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# SPN50 Series

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



### FEATURES

- ✔ 50 WATT OUTPUT POWER
- ✔ UNIVERSAL INPUT
- ✔ OVERVOLTAGE PROTECTION
- ✔ OVERCURRENT PROTECTION
- ✔ LIGHTWEIGHT CONSTRUCTION
- ✔ METAL CHASSIS WITH COVER
- ✔ COMPACT, LOW-PROFILE PACKAGES
- ✔ 3 YEAR WARRANTY

### SAFETIES/APPROVALS

UL/cUL  
CE  
CB

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load

### INPUT SPECIFICATIONS

Input Voltage.....	85 ~ 264VAC
Input Frequency.....	47 ~ 63Hz
Input Current.....	0.55 ~ 1.0A Typ.
Inrush Current.....	16A ~ 39A Typ

### OUTPUT SPECIFICATIONS

Output Voltage .....	See Chart
Voltage Adjustment.....	±10%
Minimum Load.....	0A
Efficiency.....	75 ~ 80%
Over-Voltage Protection.....	115 ~ 150% Manual Reset
Over-Current Protection.....	Automatic Recovery (105% min)
Ripple and Noise.....	100mVp-p max.
Hold-Up Time.....	40 ~ 50 mS
Line/Load Regulation.....	See Chart
Rise Time.....	800 ~ 1700 mS
Leakage Current (100/230VAC).....	0.75mA

### GENERAL SPECIFICATIONS

MTBF.....	>160,000 Hours
Isolation Voltage	
Primary to Secondary.....	3000VAC
Primary to Case.....	1500VAC
Secondary to Case.....	500VAC
Isolation Resistance.....	100 M-Ohms min.

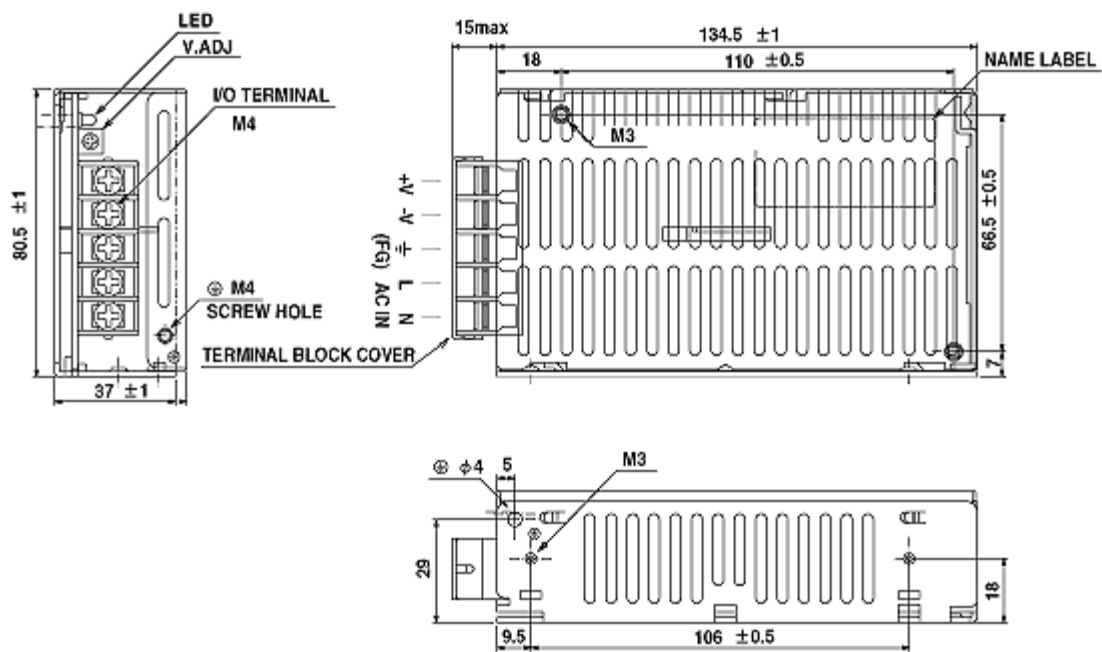
### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....	0°C ~ +60°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

MODEL	Output Voltage	Output Current (85 ~ 264 VAC)	Efficiency (%)	Load Regulation (mV max)
SPN50-05S	5VDC	10A	75%	10mV max
SPN50-12S	12VDC	4.2A	78%	10mV max
SPN50-15S	15VDC	3.4A	79%	10mV max
SPN50-24S	24VDC	2.1A	80%	20mV max
SPN50-48S	48VDC	1.1A	80%	40mV max



Note:

- Mounting screws not to exceed max penetration of 6mm
- Screw thread size is M3 (Metric) or 6/32<sup>nd</sup> (Inch)
- Weight 200g typ.
- Measurements in millimeter (mm) unless otherwise specified
- Tolerance  $\pm 1$ 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.