

# SPN100 Series

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



### FEATURES

- POWER FACTOR CORRECTED
- UNIVERSAL INPUT (AC85-264V)
- BUILT-IN OVERVOLTAGE PROTECTION
- OVERCURRENT PROTECTION
- LIGHTWEIGHT CONSTRUCTION
- METAL CHASSIS WITH COVER
- COMPACT LOW-PROFILE PACKAGE
- 3 YEAR WARRANTY

### SAFETIES/EMI



FCC-B  
EN 55022-B  
VCCI-II

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full

#### INPUT SPECIFICATIONS

|                                            |                             |
|--------------------------------------------|-----------------------------|
| Input Voltage.....                         | AC 85V-264V<br>DC 110V-340V |
| Input Frequency.....                       | 47-63 Hz                    |
| Input Current.....                         | 0.66~1.3A T                 |
| Inrush Current (100/230VAC cold start).... | 15~25A                      |
| Power Factor.....                          | 0.99                        |

#### OUTPUT SPECIFICATIONS

|                                   |                           |
|-----------------------------------|---------------------------|
| Output Voltage.....               | <a href="#">See Chart</a> |
| Output Adjustment.....            | +/-10%                    |
| Efficiency.....                   | 79~87%                    |
| Over-Voltage Protection.....      | 115 - 150% (1 min)        |
| Over-Current Protections.....     | Automatic R               |
| Ripple and Noise.....             | 100 mVp-p r               |
| Hold-Up Time.....                 | 50 mS                     |
| Line/Load Regulation.....         | See Chart                 |
| Rise Time.....                    | 800-1600 mS               |
| Leakage Current (100/230VAC)..... | 0.75 mA                   |

#### GENERAL SPECIFICATIONS

|                           |                |
|---------------------------|----------------|
| MTBF.....                 | >140,000 Hours |
| Isolation Voltage         |                |
| Primary to Secondary..... | 3000 VAC       |
| Primary to Case.....      | 1500 VAC       |
| Secondary to Case.....    | 500 VAC        |

|                           |             |
|---------------------------|-------------|
| Isolation Resistance..... | 100-Mohms 1 |
|---------------------------|-------------|

#### ENVIRONMENTAL SPECIFICATIONS

|                              |                   |
|------------------------------|-------------------|
| Operating Temperatures.....  | 0°-60°C           |
| Derates linearly 2.          |                   |
| Cooling.....                 | Convection        |
| Temperature Coefficient..... | 0.02%/°C          |
| Humidity.....                | 20 - 85% Rh (No   |
| Storage Temperature.....     | -20°~85°C         |
| Shock Vibration.....         | Shock: 20G (3 dir |
| Vibration: 10~55Hz           |                   |

#### PHYSICAL SPECIFICATIONS

Metal Enclosed, Terminal Block

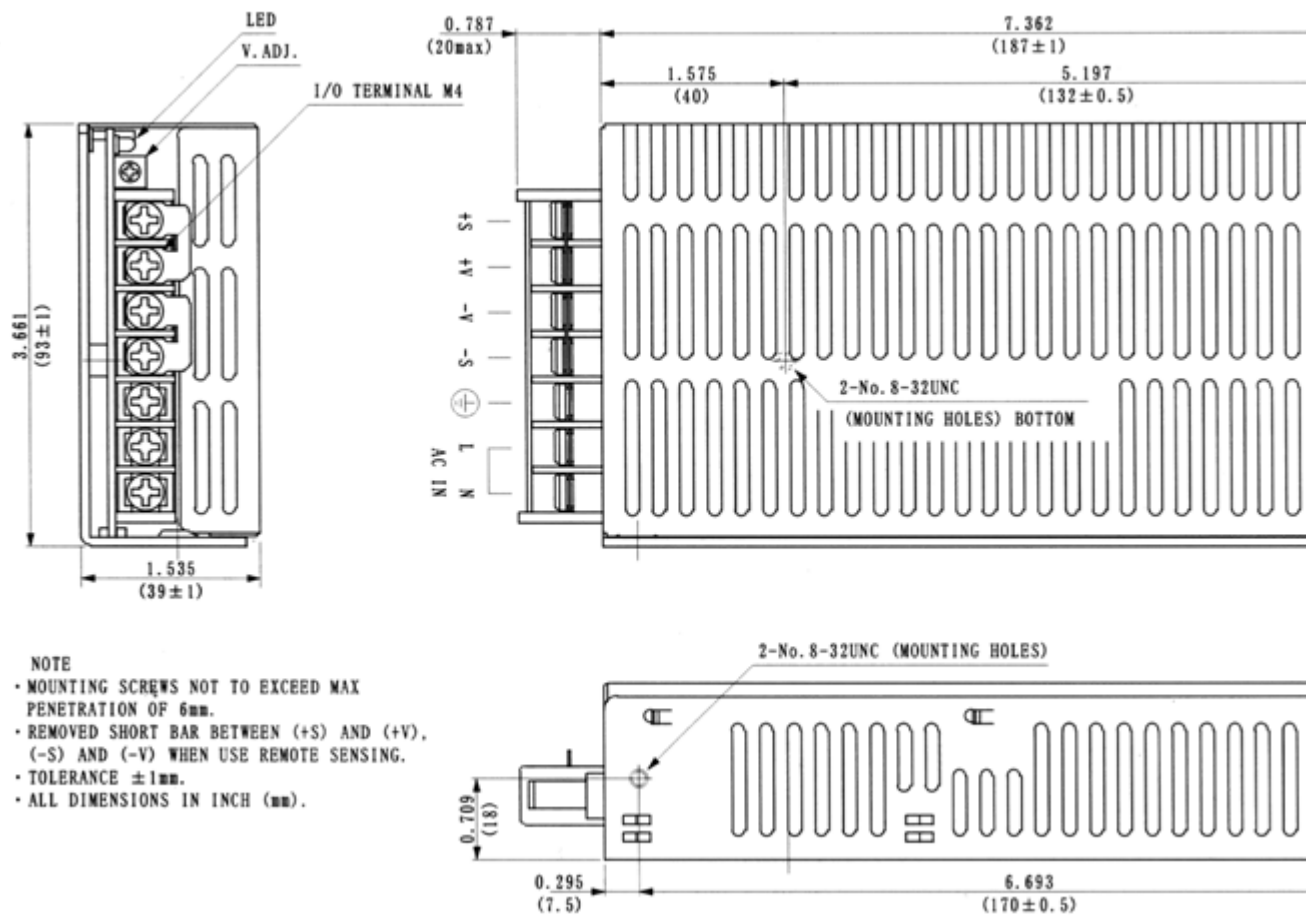
| MODEL      | OUTPUT VOLTAGE | CURRENT<br>85~264 VAC | OUTPUT CURRENT |        | LINE REGULATION<br>(85~132VAC) (170~264VAC) | LOAD I<br>(mVma: |
|------------|----------------|-----------------------|----------------|--------|---------------------------------------------|------------------|
|            |                |                       | 100VAC         | 230VAC |                                             |                  |
| SPN100-05S | 5V             | 20.0 A                | 79%            | 81%    | 10                                          |                  |
| SPN100-12S | 12V            | 8.6 A                 | 83%            | 85%    | 10                                          |                  |
| SPN100-15S | 15V            | 7.0 A                 | 83%            | 86%    | 10                                          |                  |
| SPN100-24S | 24V            | 4.4 A                 | 83%            | 86%    | 20                                          |                  |
| SPN100-48S | 48 V           | 2.2 A                 | 84%            | 87%    | 20                                          |                  |

**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.



\*No. 6-32 mounting holes  
 \*Dimensions in inches  
 \*Terminal block type connector :