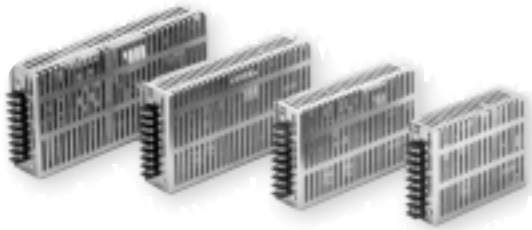




# SX50U

## 50 Watt, 120 VAC Input Fully Enclosed Switching Power Supply



### FEATURES

- ✓ **OVERVOLTAGE PROTECTION**
- ✓ **OVERCURRENT PROTECTION**
- ✓ **COMPACT SIZE / HIGH RELIABILITY**
- ✓ **CONVECTION COOLED**
- ✓ **ON/OFF LED LIGHT**
- ✓ **ADJUSTABLE OUTPUTS**
- ✓ **3 YEAR CONTINUOUS USE WARRANTY**

### SAFETIES / EMI



**FCC-B  
CISPR-B  
VCCI-2**

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load

### INPUT SPECIFICATIONS

|                      |                    |
|----------------------|--------------------|
| Input Voltage.....   | 85-132 VAC         |
| Input Frequency..... | 50/60 Hz (47-63Hz) |
| Input Current.....   | 1.1 A (typ)        |
| Inrush Current.....  | 28 A (typ)         |

### OUTPUT SPECIFICATIONS

|                              |                                  |
|------------------------------|----------------------------------|
| Output Voltage.....          | See chart                        |
| Output Adjustment.....       | ± 10%                            |
| Efficiency.....              | 72-80%                           |
| Over-Voltage Protection..... | Zener Limiter                    |
| Over-Current Protection..... | Over 105% (Automatic Recovery)   |
| Ripple and Noise.....        | 100-200 mVp-p                    |
| Hold-Up Time.....            | 20 mS (typ)                      |
| Line/Load Regulation.....    | See Chart                        |
| Rise Time.....               | 100 mS max.                      |
|                              | (at 25°C nominal output / input) |
| Leakage Current.....         | 0.5 mA max.                      |

### GENERAL SPECIFICATIONS

|                           |                    |
|---------------------------|--------------------|
| MTBF.....                 | >242,000 Hours     |
| Isolation Voltage         |                    |
| Primary to Secondary..... | AC 2000V           |
| Primary to Case.....      | AC 2000V           |
| Secondary to Case.....    | AC 500V            |
| Isolation Resistance..... | Input - Output     |
|                           | Case 100 M-Ohm min |

### 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 (not-condensing)        |
| Storage Temperature.....     | -20°C ~ +85°C                       |
| Shock/Vibration.....         | 20G (3 Directions)                  |

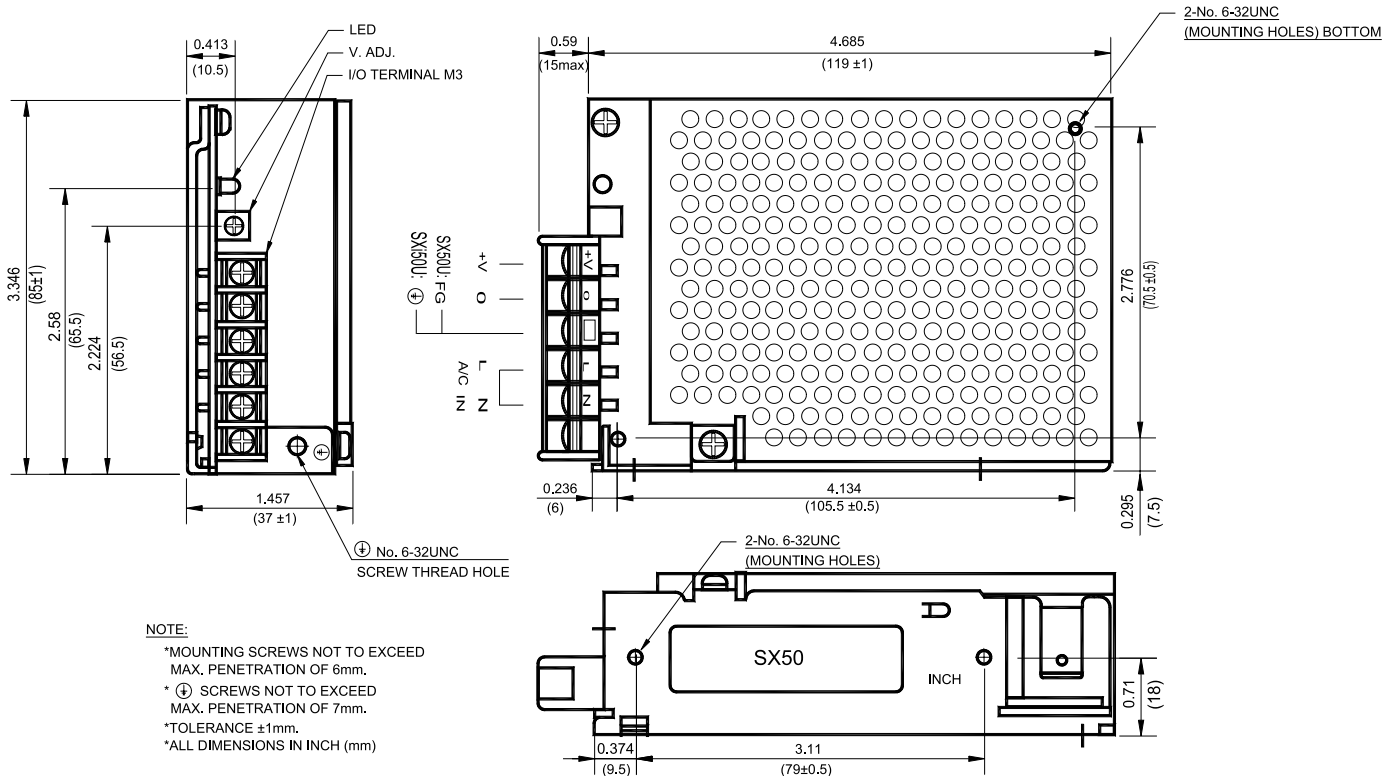
### PHYSICAL SPECIFICATIONS

Metal Enclosed - Terminal block

# Series

| MODEL            | OUTPUT VOLTAGE | OUTPUT CURRENT | EFFICIENCY (TYP) | LINE REGULATION | LOAD REGULATION | RIPPLE NOISE |
|------------------|----------------|----------------|------------------|-----------------|-----------------|--------------|
| <b>SX50U-05S</b> | 5 VDC          | 9.5 A          | 72%              | 25 mV           | 60 mV           | 100 mVp-p    |
| <b>SX50U-12S</b> | 12 VDC         | 4.2 A          | 78%              | 40 mV           | 120 mV          | 150 mVp-p    |
| <b>SX50U-15S</b> | 15 VDC         | 3.4 A          | 78%              | 40 mV           | 120 mV          | 150 mVp-p    |
| <b>SX50U-24S</b> | 24 VDC         | 2.2 A          | 80%              | 60 mV           | 160 mV          | 200 mVp-p    |

## SX50U



**NOTE:**  
 \*MOUNTING SCREWS NOT TO EXCEED MAX. PENETRATION OF 6mm.  
 \* (⊕) SCREWS NOT TO EXCEED MAX. PENETRATION OF 7mm.  
 \*TOLERANCE ±1mm.  
 \*ALL DIMENSIONS IN INCH (mm)

**NOTE:**  
 All specifications typical and nominal / full load and 25°C unless otherwise noted.  
 Mounting screw length should not exceed 0.24 inches or 6 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