

# PW152

## Universal 50 Watt Series



**ITE / Switch Mode Power Supply**

**3 Year Warranty**

- 100-250 VAC Universal Input
- Desktop Style
- Single Output to 50W
- Seven Models Available; 5V to 48V
- Regulated Output with Low Ripple
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs
- No Load Power Consumption < 0.75W
- Meets ENERGY STAR Program Requirements  
see reverse side for details



**International Safety Standard Approvals**



## Specifications

### Output Specifications

|                                  |                |  |
|----------------------------------|----------------|--|
| Line and Load Voltage Regulation | Excluding cord | +/-1%  |
| Ripple                           |                | 1% Vp-p max.   |
| Transient Response               |                | 0.5ms for 50% Load change Typical                            |
| Protection                       |                | Over-current Protection (Hiccup)<br>Short Circuit Protection |

### Input Specifications

|                     |                 |  |
|---------------------|-----------------|--|
| Input Voltage Range | Universal input | 100-250VAC -10%, +6%                           |
| Line Frequency      |                 | 47-63Hz  |
| Input Current       | 90VAC Input     | 1.2A max.                                      |
| Protection          |                 | Internal Primary Current Fuse, Inrush Limiting |

### Environmental Specifications

|                     |   |               |
|---------------------|---|---------------|
| Thermal Performance | Operating temperature full load, no derating convectional cooling Non vented case | 0° C to 40° C |
| Relative Humidity   | Non-condensing  | 5% to 95%     |
| Altitude            |   | 0-10,000 feet |

### General Specifications

|                                |                         |   |
|--------------------------------|-------------------------|---|
| Topology                       |                         | Switching-Fixed Frequency Flyback   |
| Efficiency                     | 5V and 9V<br>12V to 24V | 70% min.<br>≥ 84%   |
| Hold-up Time                   | @120VAC<br>@240VAC      | 18ms min.<br>80ms min.  |
| Dielectric Withstand           |                         | 3,000VAC, 4,250VDC<br>Primary-Secondary   |
| Storage Temp                   |                         | -30° C to 85° C   |
| Approvals and Safety Standards |                         | UL60950-1,<br>IEC/EN60950-1<br>EMC : EN55022 / 55024<br>61000                         |
| MTBF                           |                         | 100,000 Calculated Hours  |
| Case and Dimension             |                         | JEC#18<br>4.49L x 2.36W x 1.38H (in)<br>114.0L x 60.0W x 35.0H (mm)                   |
| Case Material                  |                         | Black 94V0<br>Polycarbonate   |
| Cord and Connectors            |                         | 6ft. 2 Conductor, 18AWG,<br>AULT#3 Connector.<br>Other connectors are also available. |

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For the most current data and application support visit [www.slpower.com](http://www.slpower.com)

| Ault Part Number | Output Voltage | Output Currents |        | Max Watts | Ripple Vp-p max. |
|------------------|----------------|-----------------|--------|-----------|------------------|
|                  |                | Min             | Max    |           |                  |
| PW152KA05XX*     | 5 V            | 0.00 A          | 6.00 A | 30.0 W    | 50 mV            |
| PW152KA09XX*     | 9 V            | 0.00 A          | 5.00 A | 45.0 W    | 90 mV            |
| PW152KA12XX      | 12 V           | 0.00 A          | 4.20 A | 50.4 W    | 120 mV           |
| PW152KA15XX      | 15 V           | 0.00 A          | 3.33 A | 50.0 W    | 150 mV           |
| PW152KA18XX      | 18 V           | 0.00 A          | 2.80 A | 50.4 W    | 180 mV           |
| PW152KA24XX      | 24 V           | 0.00 A          | 2.00 A | 48.0 W    | 240 mV           |
| PW152KA48XX*     | 48 V           | 0.00 A          | 1.00 A | 48.0 W    | 480 mV           |

### Ault Part Number Key

|                     |                        |                         |            |                  |
|---------------------|------------------------|-------------------------|------------|------------------|
| PW152               | K                      | A                       | 05         | XX               |
| Product Family Name | Manufacturing Location | Design Revision Changes | Voltage DC | Connector Number |

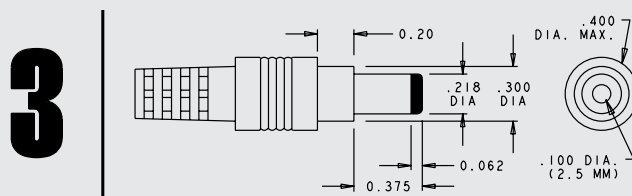
### Input Configuration



IEC320  
w/ground  
C14  
(F)

Specify the Input Configuration Code in your order.

### Pin Connections



|   |                                     |
|---|-------------------------------------|
| Pinout Code                                     | Center contact: positive            |
| Description                                     | Switchcraft 760 plug or equivalent  |
| Suggested Mating                                | Switchcraft 712A jack or equivalent |
| Other Connectors are available by special order |                                     |

### Energy Star Specifications

Power Supplies that are single voltage external AC to DC and AC to AC included with other retail products and single voltage external AC to DC or AC to AC power supplies sold separately; and consumer audio and video equipment, which includes compact audio products, DVD players and recorders as well as television adapters. (Please refer to the reverse side of data sheet for specifications and marking protocol.)

#### Energy-Efficiency Criteria for Active Mode

To be eligible for ENERGY STAR qualification, an external power supply must meet or exceed a minimum efficiency for Active Mode, which varies based on the model's nameplate output power. The table below outlines the equations for determining minimum average efficiency.

| Nameplate Output Power | Minimum Average Efficiency in Active Mode |
|------------------------|---|
| 0 to ≤ 1 watt          | ≥ 0.49 * P <sub>no</sub>                  |
| > 1 to ≤ 49 watts      | ≥ [0.09 * Ln (Nameplate Output)] + 0.49   |
| > 49 watts             | ≥ 0.84                                    |

#### Energy Consumption Criteria for No Load

The second half of the ENERGY STAR specification is the No-Load power requirement, which specifies the maximum AC power that may be used by a qualifying external power supply in the No-Load condition. Maximum power consumption levels for No-Load Mode are provided below.

| Nameplate Output Power | Maximum Power in No-Load |
|------------------------|--------------------------|
| 0 to < 10 watts        | ≤ 0.5 watts              |
| ≥ 10 to ≤ 250 watts    | ≤ 0.75 watts             |

\*Does not meet Energy Star requirements



SL Power Electronics Corp • 6050 King Drive • Ventura CA, 93003 • Phone:805.486.4565 • Fax:805.487.8911 • Email:info@slpower.com • www.slpower.com

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