PW153KB Universal 40 Watt Series



ITE / Switch Mode Power Supply

- 100-240 VAC Universal Input
- Desktop Style
- Single Output to 40W
- Five Models Available; 12V to 48V
- Regulated Output with Low Ripple
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs Also Available
- Designed to Meet EISA Requirements see reverse side for details





International Safety Standard Approvals









Specifications

| Output Specifications | |
|--|---|
| Line and Load Regulation (Excluding cord) | Line Voltage +/-1% Load Voltage +/-5% |
| Ripple | 1% Vp-p max. |
| Transient Response | 0.5ms for 50% Load change Typical |
| Protection | Over-current Protection (Hiccup) Short Circuit Protection |

| Input Specifications | | |
|----------------------|-----------------|--|
| Input Voltage Range | Universal input | 100-240VAC -10%, +10% |
| 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 Specification | ns | |
|-----------------------------------|--------------------|---|
| Topology | | Switching-Fixed Frequency Flyback |
| Efficiency | | Designed to Meet EISA Requirements — see reverse side |
| Hold-up Time | @120VAC @240VAC | 18ms min. 80ms min. |
| Dielectric Withstand | | 3,000VAC or 4,250VDC Primary-Secondary 1,500VAC or 2,150VDC Primary-F.G.; 500VDC Secondary-F.G. |
| Storage Temp | | -30° C to 85° C |
| Approvals and Safety Standards | | UL60950-1, IEC/EN60950-1 EMC : EN55022/55024/61000 |
| MTBF | | 100,000 Calculated Hours |
| Case and Dimension | | Desktop style 3.98L x 2.4W x 1.34H (in) 101.0L x 61.0W x 34.0H (mm) |
| Case Material | | Black 94V0 Polycarbonate |
| Cord and Connectors | | 18AWG 1,800mm 2 Conductor. Ault #3 Connector. Other connectors are also available. |



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For the most current data and application support visit www.slpower.com

| Ault Part Number | Output Voltage | Output Current Max | Max Watts | Ripple Vp-p max. |
|------------------|-------------------|-----------------------|--------------|---------------------|
| PW153KB12XX | 12 V | 3.40 A | 40.8 W | 120 mV |
| PW153KB15XX | 15 V | 2.70 A | 40.5 W | 150 mV |
| PW153KB18XX | 18 V | 2.20 A | 40.0 W | 180 mV |
| PW153KB24XX | 24 V | 1.70 A | 40.8 W | 240 mV |
| PW153KB48XX | 48 V | 0.83 A | 39.8 W | 480 mV |

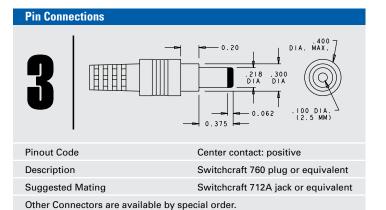
| Ault Part Number Key | | | | |
|---------------------------|---------------------------|-------------------------------|---------------|---------------------|
| PW153 | K | В | 12 | XX |
| Product Family Name | Manufacturing Location | Design Revision Changes | Voltage DC | Connector Number |

Input Configuration



IEC320 w/ground C14 (F)

Specify the Input Configuration Code in your order.



2007 Energy Independence and Security Act – EISA

The Energy Independence and Security Act of 2007 was passed in December of 2007 and addresses minimum efficiency standards and standby levels for Class A external power supplies that are 250 watts and under. This law stipulates that external power supplies manufactured on July 1, 2008 and beyond meet certain minimum efficiency and standby criteria as defined below.

Minimum Efficiency Criteria

Active mode is defined as when a power supply's input is connected to line voltage AC and its output is connected to a DC or AC load drawing a portion of the product's power output. Depending on the power rating for the power supply, it must meet the minimum efficiency criteria outlined below.

Energy-Efficiency Criteria for Active Mode:

output power on minimum average adapter label efficiency percentage

0 to ≤ less than 1 watt \geq 0.50 * output power on adapter label > 1 to ≤ 51 watts \geq [0.09 * Ln (output power on adapter

label)] + 0.50

> 51 watts ≥ 0.85

The power supply must also meet a requirement for when its input is connected to a line voltage AC but its output is not connected to a load. Depending on the power output of the supply, it must keep its energy consumption below the following values.

Energy Consumption Criteria for No Load Mode:

output power on maximum power consumption

adapter label in no-load mode 0 to < 250 watts $\leq 0.5 \text{ watts}$

