

# MW174KB

## Universal 40-65 Watt Series



**Medical / Switch Mode Power Supply**

**3 Year Warranty**

- 100-240 VAC Universal Input
- Desktop Style
- Single Output to 65W
- Four Models Available; 12V to 24V
- Regulated Output with Low Ripple
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs
- 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%<br>Load Voltage +/-5%                     |
| Ripple                                    | 1% Vp-p max.                                                 |
| Transient Response                        | 0.5ms for 50%<br>Load change Typical                         |
| Protection                                | Over-current Protection (Hiccup)<br>Short Circuit Protection |

### Input Specifications

|                     |                 |                                                      |
|---------------------|-----------------|------------------------------------------------------|
| Input Voltage Range | Universal input | 100-240VAC -10%, +10%                                |
| Line Frequency      |                 | 47-63Hz                                              |
| Input Current       | 90VAC Input     | 1.5A max.                                            |
| Protection          |                 | Internal Primary<br>Current Fuse,<br>Inrush Limiting |

### Environmental Specifications

|                     |                                                                                            |               |
|---------------------|--------------------------------------------------------------------------------------------|---------------|
| Thermal Performance | Operating temperature<br>full load, no derating<br>convictional cooling<br>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<br>Frequency Flyback                                                                       |
| Efficiency                        |                                                                        | Designed to Meet EISA<br>Requirements — see<br>reverse side                                                |
| Hold-up Time                      | @120VAC                                                                | 18ms min.                                                                                                  |
| Dielectric Withstand              |                                                                        | 4,000VAC or 5,656VDC<br>Primary-Secondary;<br>1,500VAC or 2,150VDC<br>Primary-F.G; 500VDC<br>Secondary-F.G |
| Storage Temp                      |                                                                        | -30° C to 85° C                                                                                            |
| Approvals and<br>Safety Standards | Australian, Japanese<br>certification available<br>- extra fees apply. | UL60601-1,<br>IEC/EN60601-1<br>EMC : EN60601-1-2<br>EN55024                                                |
| MTBF                              |                                                                        | 100,000 Calculated Hours                                                                                   |
| Case and Dimension                |                                                                        | Desktop Style<br>4.20L x 2.60W x 1.46H (in)<br>107.0L x 66.0W x 37.0H (mm)                                 |
| Case Material                     |                                                                        | Black 94V0<br>Polycarbonate                                                                                |
| Cord and Connectors               |                                                                        | 18 AWG 1,500mm<br>2 Conductor. Ault #3<br>Connector. Other connectors<br>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 Current Max | Max Watts | Ripple Vp-p max. |
|------------------|----------------|--------------------|-----------|------------------|
| MW174KB12XX      | 12 V           | 5.00 A             | 60.0 W    | 120 mV           |
| MW174KB15XX      | 15 V           | 4.00 A             | 60.0 W    | 150 mV           |
| MW174KB18XX      | 18 V           | 3.40 A             | 61.2 W    | 180 mV           |
| MW174KB24XX      | 24 V           | 2.70 A             | 64.8 W    | 240 mV           |

### Ault Part Number Key

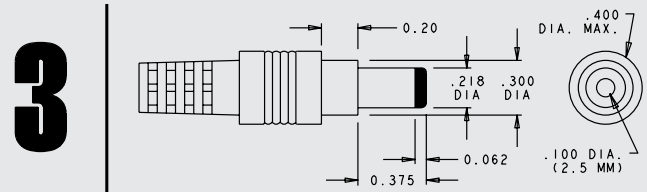
|                     |                        |                         |            |                  |
|---------------------|------------------------|-------------------------|------------|------------------|
| MW174               | K                      | B                       | 12         | XX               |
| Product Family Name | Manufacturing Location | Design Revision Changes | Voltage DC | Connector Number |

### Input Configuration



IEC320  
w/ground  
C14  
(F)

### 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 |                                     |

### 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 adapter label | minimum average efficiency percentage                |
| 0 to ≤ less than 1 watt       | ≥ 0.50 * output power on adapter label               |
| > 1 to ≤ 51 watts             | ≥ [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 adapter label | maximum power consumption in no-load mode |
| 0 to < 250 watts              | ≤ 0.5 watts                               |



SL Power Electronics Corp • 6050 King Drive • Ventura, CA 93003 • Phone:805.486.4565 • Fax:858.712.2040 • Email:info@slpower.com • www.slpower.com

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Rev.6/9/08