MW173KB

Universal 20 – 32 Watt Series

Medical Switch-Mode Power Supply

3 Year Warranty

- *100-240VAC Universal Input*
- *Desktop Style*
- *5V to 24V Single Output Models, up to 32W*
- *Modified and Custom Designs*
- *Regulated Output with Low Ripple*
- *Impact-Resistant Polycarbonate Enclosure*
- *No load Power Consumption < 0.50W*
- *Designed to meet EISA Requirements (see page 3 for details).*

International Safety Standard Approvals

c UL us CE RoHS

AULT

Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

Output Specifications

Line and Load Voltage Regulation	Excluding Cord	Line: +/-1% Load: +/-5%
Ripple		1% Vp-p max.
Transient Response		0.5mS for 50% Load Change, typical.
Protection		Overcurrent Protection (Hiccup). Short Circuit Protection

Input Specifications

Input Voltage Range	Universal Input	100-240VAC, -10%, +10%
Line Frequency		47-63Hz
Input Current	90 VAC	1.0A, max.
Protection		Internal Primary Current Fuse, Inrush Limiting

Environmental Specifications

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

General Specifications

Topology		Switching - Fixed Frequency Flyback
Efficiency		Designed to meet EISA Requirements - see page 3
Hold-up Time	@ 115VAC	18mS, min.
Dialectric Withstand		4,000VAC or 5,656VDC 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		UL60601-1 IEC/EN60601-1 EMC: EN60601-1-2/ EN55024
MTBF		100,000 Calculated Hours
Case and Dimensions		Desktop Style: 3.74"L x 2.13"W x 1.26"H 95mm L x 54mm W x 33mm H
Case Material		Black 94V0 Polycarbonate
Cord and Connectors		18AWG, 1,800mm 2 conductor. (5V, 6V model: 1,500mm). Ault #3 connector. Other connectors are available.

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OUTPUT PARAMETERS				
Model Number	Volts (V)	Output Current (max)	Max Watts	Ripple (Vp-p max)
MW173KB0503F01	5 V	4.00 A	20.0 W	50mV
MW173KB0603F01	7.5 V	3.00 A	22.5 W	75mV
MW173KB0903F01	9 V	3.00 A	27.0 W	90mV
MW173KB1203F01	12 V	2.50 A	30.0 W	120mV
MW173KB1503F01	15 V	2.00 A	30.0 W	150mV
MW173KB1803F01	18 V	1.67 A	30.0 W	180mV
MW173KB2403F01	24 V	1.33 A	32.0 W	240mV

Note: Part numbers above include #3 output connector and IEC320 C14 grounded input receptacle. See below for other options.

Model Number Key

MW173 K B 05 03 F 01

- **01** — Modification Designator. "01" is standared part, "02" and higher denotes a modified model.
- **F** — Input Receptacle. See Below for options. "F" receptacle (IEC320, C14 type, grounded) is standard.
- **03** — Output Connector. "03" connector is standard. See below. Other output connectors available. Contact the factory for more details
- **05** — Output Voltage: 05=5V, 09=9V, 12=12V, 15=15V, 18=18V, 24=24V, 48=48V.
- **B** — Design Revision Changes
- **K** — Manufacturing Location
- **MW173** — Product Family

AC Input Receptacle Options

Desktop			Wall-Plug
			
IEC320 - C14 Class I Grounded (F)	IEC320 - C18 Class II Ungrounded (Q)	IEC320 - C8 Class II "Shaver" (N)	N. America Japan Fixed (B)

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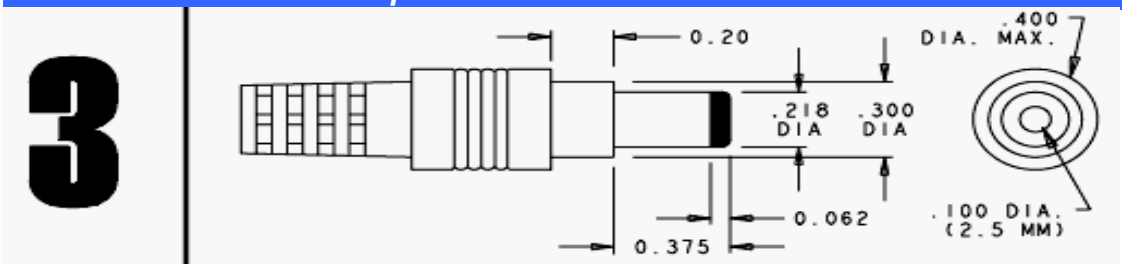
2007 Energy Independence and Security Act - EISA	
The Energy Independence and Security Act of 2007 was passed in December of 2007 and addresses minimum efficiency standards and standby levels for Class A external power supplies that are 250 Watts and under. This law stipulates that external power supplies 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 a line voltage AC and it's output is connected to a DC or AC load, drawing a portion of the product's power output. Depending upon 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 < 1 Watt	≥ 0.50 * output power on the label
> 1 watt to ≤ 51 watts	≥ [0.09 * Ln (output power on adapter label)] + 0.50
> 51 watts	≥ 0.85
Energy Consumption Criteria for No Load Mode: The power supply must also meet a requirement for when its input is connected to line voltage AC but its output is not connected to a load. Depending upon the power output of the supply, it must keep its energy consumption below the following values:	
Output Power on Adapter Label	Maximum Power Consumption in No-Load Mode
0 to < 250 Watts	≤ 0.50 watts

Output Connector Information



Notes:

1. Center Contact = Positive
2. Connector is Switchcraft 760 plug or equivalent.
3. Suggested Mating Connector is Switchcraft 712A jack or equivalent.
4. Other output connector options are available. Contact your local representative for details.

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