

**Open Frame Type Switching Power Supply**

**FEATURES**

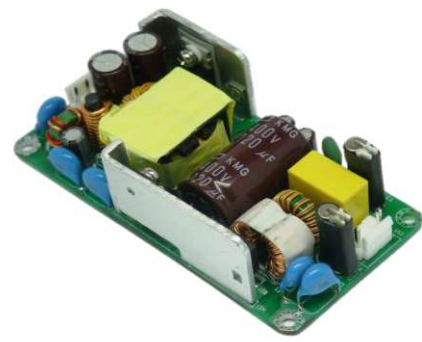
- Both ITE & Medical Approvals.
- Medical Body Floating ( BF ) rated, Class I Power Supply
- Medical applications Protection: Means of patient protection ( MOPP )
- Altitude during operation: ITE up to 5000m ,Medical Below 3000m.
- Less than 75mW no-load power consumption
- Low leakage current
- 3 year warranty

**ELECTRICAL SPECIFICATIONS**

- Input range : 90 - 264VAC
- Frequency : 47 - 63Hz
- Inrush current : < 45A peak @115VAC; < 90A peak @230VAC cold start @25°C
- Input current ( rms ) : 2A @115VAC; 1A @230VAC max.
- Efficiency : > 88% typical @full load, 115VAC ( 5V series excluded )
- Earth leakage current < 100uA @264VAC
- Maximum output power ( Po ) : 65 Watts convection cooling
- Hold-up time : > 10ms typical @full load, 115VAC
- Short circuit protection : Auto-recovery
- Over load protection : 110% to 180% maximum rating, Auto-recovery
- Over voltage protection : Latching type. AC Recycle

**ENVIRONMENTAL**

- Operating temperature : 0 to +70°C ( Derate linearly 2.5% per °C from 51 to 70°C )
- Storage temperature: -10°C to +85°C
- Humidity: Non-condensing 10% to 90%
- MTBF : > 100,000 hours @full load and 25°C ambient temperature



Dimension : L101.6 x W50.8 x H27.5mm (4" x 2" x 1.08")  
Weight : 0.136 kgs. max. ( 0.30 lbs. )

**SAFETY STANDARDS**

- UL60601-1 3rd Edition
- UL/c-UL UL60950-1
- EN60601-1 3rd Edition
- TUV EN60950-1
- IEC EN60601-1 3rd Edition
- CB IEC 60950-1

**EMC STANDARDS**

- EN60601-1-2
- EN55024
- EN 55011 Class B
- EN55022 Class B
- FCC Part 15 Class B
- FCC Part 18 Class B
- CE

**DC OUTPUT & FEATURES**

Model	Output Rating	Minimum Load	Maximum Load	Po	Average Efficiency	O/P Regulation	Ripple & Noise (Vp-p)	
							Full Load	< 30% Load
M1040-05-X	+5V	0A	8.00A	40W	> 86%	+5%	100mV	200mV
M1065-12-X	+ 12V	0A	5.42A	65W	> 89%	+3%	120mV	200mV
M1065-15-X	+ 15V	0A	4.34A	65W	> 89%	+3%	120mV	300mV
M1065-19-X	+ 19V	0A	3.43A	65W	> 89%	+3%	120mV	300mV
M1065-24-X	+ 24V	0A	2.71A	65W	> 89%	+3%	200mV	300mV
M1065-28-X	+ 28V	0A	2.33A	65W	> 89%	+3%	200mV	350mV
M1065-48-X	+ 48V	0A	1.36A	65W	> 89%	+2%	200mV	480mV
M1065-54-X	+ 54V	0A	1.21A	65W	> 89%	+2%	200mV	480mV

- Note:
1. In/Output connector options: X=J ( JST VH Type Connector or Equ. ), X=M ( Molex 5277 Type Connector or Equ. )
  1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
  2. The ripple and noise will be higher while load under 30% of rate load during Burst Mode operation.  
The Burst Mode operation is to meet the latest efficiency regulations.
  3. The output voltage is set by manufacturer.

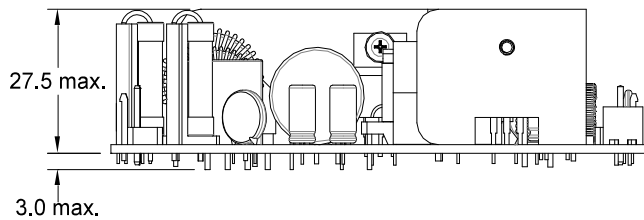
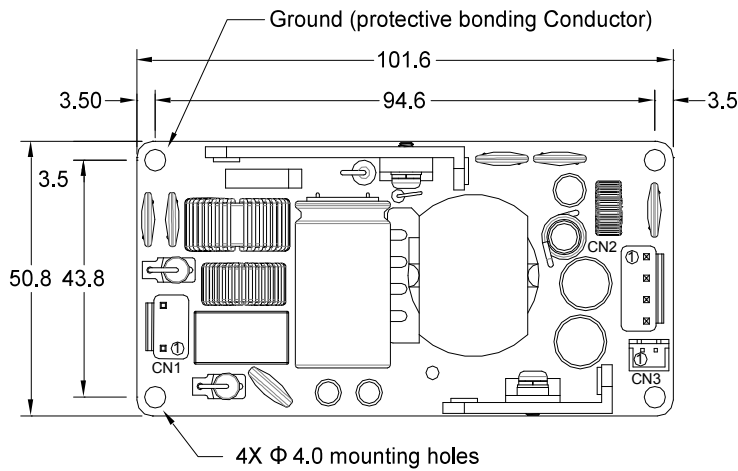


**SMP TECHNOLOGY, INC.**

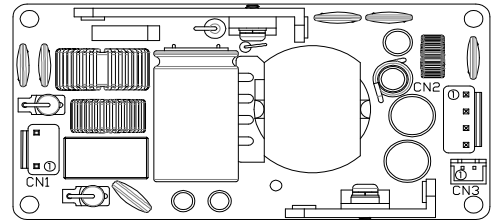
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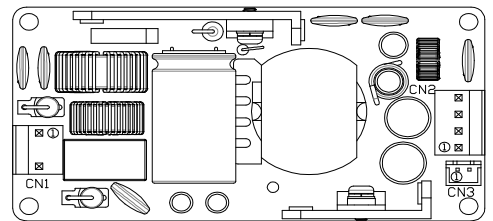
**MECHANICAL SPECIFICATION**



In/Output connector options: X=J (JST)



In/Output connector options: X=M (Molex)



**MATCHING CONNECTORS**

CN1: Input Connector

JST B3P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-3N or equivalent

Pin #	Signal
1	AC Neutral
2	AC Line

MOLEX 5277 09-65-2029 or equivalent

mates with MOLEX 5265 09-76-1020 or equivalent

Pin #	Signal
1	AC Line
2	AC Neutral

CN2: Main Output Connector

JST B4P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-4N or equivalent

Pin #	Signal
1	GND
2	GND
3	+Vo
4	+Vo

MOLEX 5277 09-65-2048 or equivalent

mates with MOLEX 5239 09-52-4044 or equivalent

Pin #	Signal
1	+Vo
2	+Vo
3	GND
4	GND

CN3: Remote Sense Connector

JST B2B-XH-A pitch: 2.5mm or equivalent, mates with JST XHP-2 or equivalent

Pin #	Signal
1	+Vo Sense +
2	+Vo Sense -



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