Size: 4in x 2in x 1.08in (101.6mm x 50.8mm x 27.5mm)

FEATURES

- Both ITE & Medical Approvals
- Medical Body Floating (BF) Rated
- Class I Power Supply
- Altitude During Operation: ITE up to 5000m, Medical Below 3000m
- Low Leakage Current
- Wide Input Voltage Range of 90~264VAC
- Output Voltage Ranging from 5-54V
- Medical Applications Protection: Means of Patient Protection (MOPP)
- Short Circuit, Over Load, and Over Voltage Protection
- High Efficiency >89% (Except 5V models which are >86%)
- Meets Efficiency Level VI
- UL60601-1, EN60601-1, and IEC EN60601-1 3rd Edition Safety Approvals, among others

DESCRIPTION

The PSIM65B2 series of AC DC open frame power supplies provides up to 65 watts of output power in a 4” x 2” x 1.08” frame. This series consists of single output models that have a wide input voltage range of 90~264VAC and output voltages ranging from 5V to 54V. These models have a low leakage current and high efficiency greater than 89%.They are also Efficiency Level VI and RoHS compliant. Each model is protected against short circuit, over load, and over voltage conditions, and also has means of patient protection (MOPP). Different input and output connectors are available, please call factory for ordering details.

MODEL SELECTION TABLE

Model Number(1)	Input Voltage Range	Output Voltage(2)	Output Current		Ripple & Noise(3)		Output Regulation	Output Power	Efficiency
			Min Load	Max Load	Full Load	<30% Load			
PSIM040B2-1Y050Z	90~264VAC	5V	0A	8.00A	100mV	200mV	±5%	40W	>86%
PSIM065B2-1Y120Z		12V	0A	5.42A	120mV	200mV	±3%	65W	>89%
PSIM065B2-1Y150Z		15V	0A	4.34A	120mV	300mV	±3%	65W	>89%
PSIM065B2-1Y190Z		19V	0A	3.43A	120mV	300mV	±3%	65W	>89%
PSIM065B2-1Y240Z		24V	0A	2.71A	200mV	300mV	±3%	65W	>89%
PSIM065B2-1Y280Z		28V	0A	2.33A	200mV	350mV	±3%	65W	>89%
PSIM065B2-1Y480Z		48V	0A	1.36A	200mV	480mV	±2%	65W	>89%
PSIM065B2-1Y540Z		54V	0A	1.21A	200mV	480mV	±2%	65W	>89%

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Inrush Current	@115VAC, Cold Start @25ºC			45	A
	@230VAC, Cold Start @25ºC			90	
Input Current (rms)	@115VAC			2	A
	@230VAC			1	
Touch Current	@264VAC			100	uA
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Output Power		See Table			
Output Current		See Table			
Minimum Load		0			A
Ripple & Noise (20MHz bandwidth)		See Table			
Hold-Up Time	@Full Load, 115VAC		10		mS
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Load Protection	Maximum Rating, Auto-Recovery	110		180	%
Over Voltage Protection	Latching Type	AC Recycle			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derate linearly 2.5% per ºC from 51 to 70ºC	0		70	ºC
Storage Temperature		-10		85	ºC
Humidity	Non Condensing	10		90	%
Cooling		Convection			
MTBF	@Full Load and 25ºC ambient temperature	100,000			hours
GENERAL SPECIFICATIONS					
Efficiency	@full load, 115VAC (5V series excluded)		>88		%
No Load Power Consumption				75	mW
PHYSICAL SPECIFICATIONS					
Weight		4.8oz (136g)			
Dimensions (L x W x H)		4in x 2in x 1.08in (101.6mm x 50.8mm x 27.5mm)			
SAFETY & EMC CHARACTERISTICS					
Safety Approvals	UL 60601-1 3rd Edition(4) UL/c-UL UL60950-1(4) 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
	EN 55022				Class B
	FCC Part 15				Class B
	FCC Part 18				Class B
	CE				

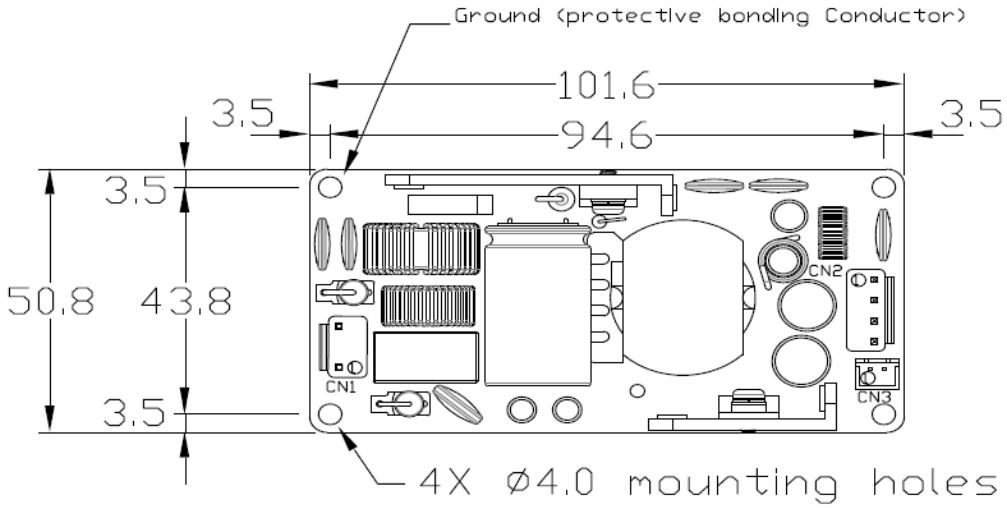
NOTES

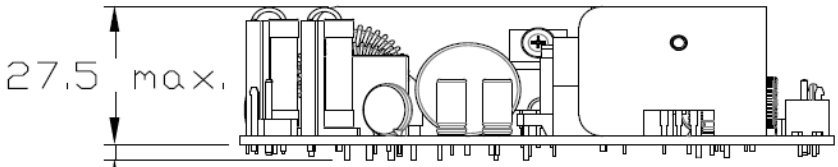
(1) Z indicates In/Output connector options: "Z"= J (JST VH Type Connector or Equ.), Z=M (Molex 5277 Type Connector or Equ.)
(2) Output Voltage is set by manufacturer
(3) Ripple and nose are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
Ripple and noise will be higher while load is under 30% of rate load during Burst Mode operation. Burst Mode operation is to meet the latest efficiency regulations.
(4) This product is Listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

MECHANICAL DRAWINGS

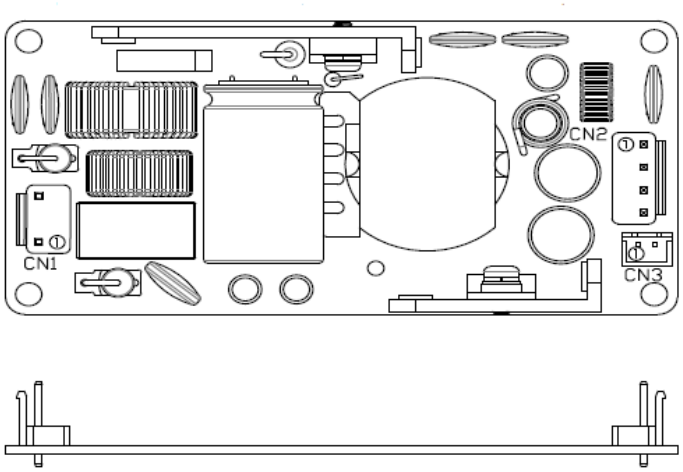
Mechanical Specification



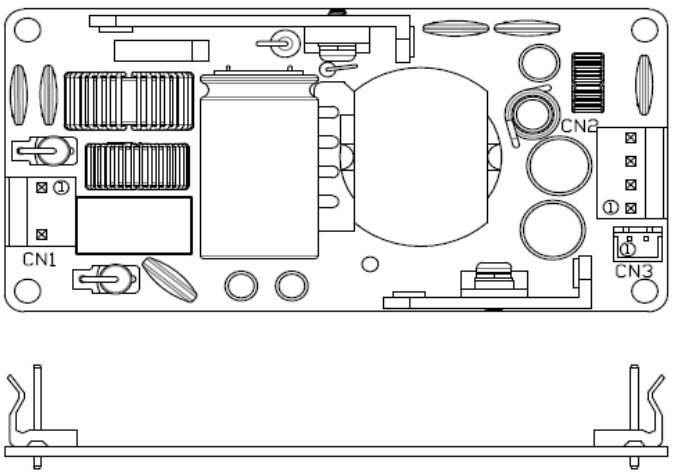


Dimension: L101.6(4") x W50.8(2")x H27.5(1.08")
Unit : mm

In/Output Connector: J (JST)



In/Output Connector: 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 -

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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