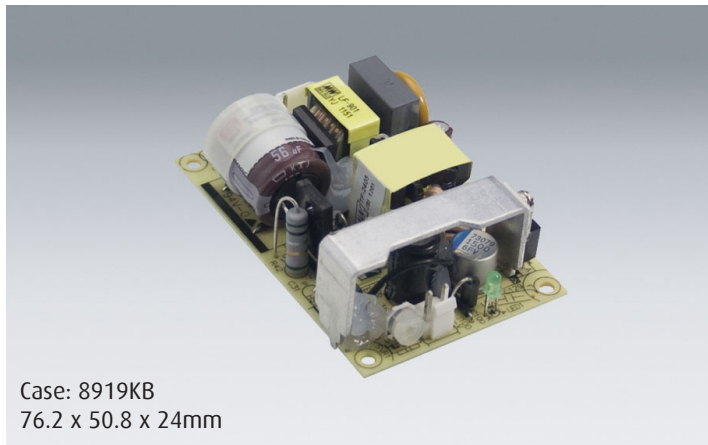


# EPS-25 Series

25W Single Output Switching Power Supply



Case: 8919KB  
76.2 x 50.8 x 24mm

## Features

- Universal AC input / Full range
- High efficiency up to 90%
- Protections: Short Circuit / Over Load/ Over voltage
- Cooling by free air convection
- 3 x 2" compact size
- LED indicator for Power On
- Operating temperature up to 2000 metres
- No load power consumption <0.3W
- 3 years warranty



## Specification

INPUT	Voltage	85 ~ 264VAC 120 ~ 370VAC									
	Frequency	47 ~ 63 Hz									
	AC current	0.6A/115VAC 0.4A/230VAC									
	Inrush Current (Typ.)	Cold start 35A/230VAC									
	Leakage current	<1mA/240VAC									
OUTPUT	MODEL No.	EPS-25-3.3	EPS-25-5	EPS-25-7.5	EPS-25-12	EPS-25-15	EPS-25-24	EPS-25-27	EPS-25-36	EPS-25-48	
	DC Voltage	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V	
	Rated current	5A	5A	3.4A	2.1A	1.7A	1.05A	0.95A	0.7A	0.53A	
	Current Range	0 ~ 5.5A	0 ~ 5.5A	0 ~ 3.74A	0 ~ 2.34A	0 ~ 1.87A	0 ~ 1.17A	0 ~ 1.05A	0 ~ 0.78A	0 ~ 0.59A	
	Rated Power	16.5W	25W	25.5W	25.2W	25.5W	25.2W	25.65W	25.2W	25.44W	
	Peak Load (10 secs)	18.15W	27.5W	28.05W	28.08W	28.05W	28.08W	28.35W	28.08W	28.32W	
	R&N	60mVp-p	60mVp-p	80mVp-p	100mVp-p	100mVp-p	180mVp-p	180mVp-p	200mVp-p	240mVp-p	
	Efficiency	79%	81%	83%	86%	87%	88%	89%	89%	90%	
	Voltage Adjustment Range	3.1 ~ 3.6V	4.75 ~ 5.5V	7.13 ~ 8.25V	10.8 ~ 13.5V	13.5 ~ 16.5V	21.6 ~ 27V	24.3 ~ 29.7V	32.4 ~ 39.6V	43.2 ~ 52.8V	
	Voltage Tolerance	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	Set up, Rise Time	1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load									
	Hold Up Time	50ms/230VAC 16ms/115VAC at full load									
	PROTECTION	Overload	115 ~ 170% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed								
Over Voltage		3.7 ~ 4.6V 5.6 ~ 6.75V 8.63 ~ 10.5V 14 ~ 17V 17.25 ~ 20.25V 27.6 ~ 32.4V 31.05 ~ 36.45V 39.7 ~ 46.8V 53.3 ~ 64.8V Protection Type: Shut down o/p voltage, re-power on to recover									
ENVIRONMENT	Working Temperature	-30 ~ +70°C (Please refer to 'Derating Curve' section)									
	Working Humidity	20 ~ 90% RH non-condensing									
	Storage Temp., Humidity	-40 ~ +85°C, 10 ~ 95% RH									
	Temp Coefficient	±0.0.3%/°C (0 ~ 50°C)									
	Operating Altitude	2000 metres									
SAFETY & EMC	Vibration	10 ~ 500Hz, 2G 10 min./1cycle, period for 60 min. each along X, Y, Z axes									
	Safety Standards	UL60950-1, TUV EN60950-1 approved									
	Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC									
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC/ 25°C/ 70% RH									
	EMC Emission	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3									
OTHERS	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A									
	M.T.B.F.	655.3Khrs min. MIL-HDBK-217F (25°C)									
	Packing	0.081Kg; 120pcs/10.7Kg/0.97CUFT									

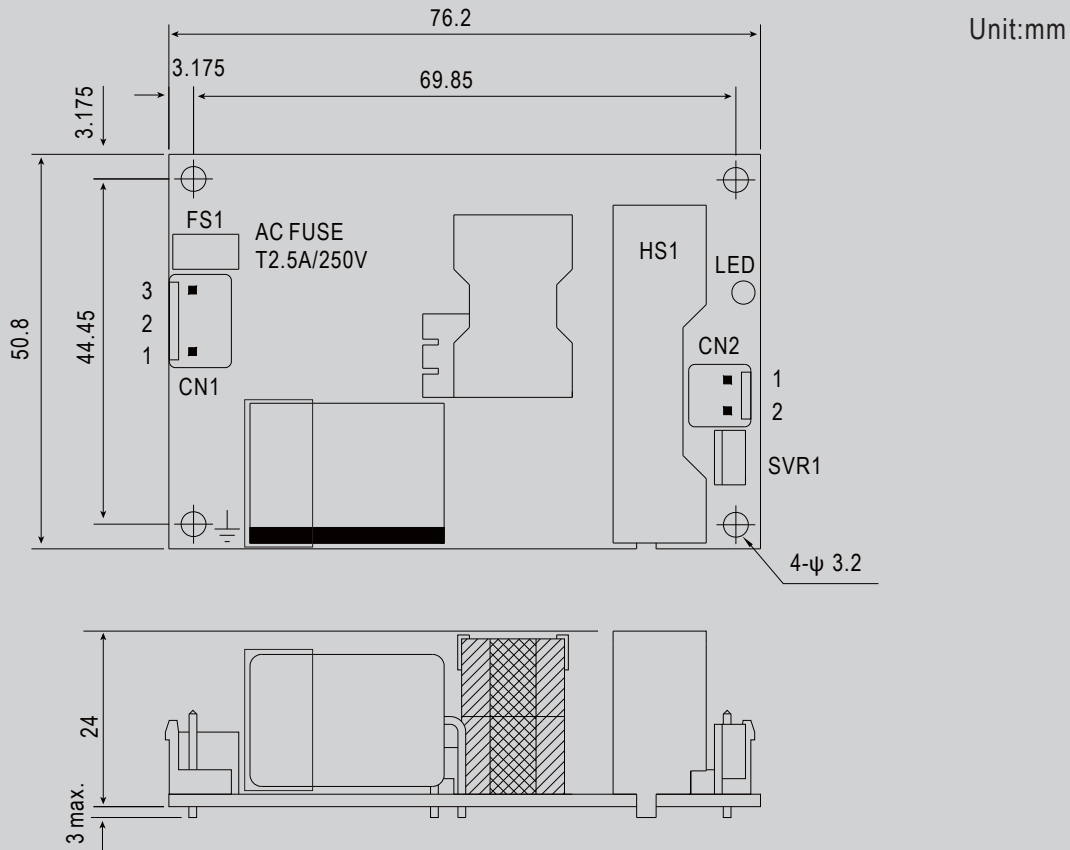
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered as a component which will be installed into final equipment. All the EMC tests are being executed by mounting the unit on a 360mm\*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to 'EMI testing of component power supplies.'
5. Derating maybe needed under low input voltages. Please check the derating curve for more details.
6. 33% duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.
7. EPS-25-15/24/27/36/48 without HS1.

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## Mechanical Diagram



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/L		

DC Output Connector (CN2) : JST B2P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	+V		

⚠ HS1(Note.7) must have safety isolation distance with system case.

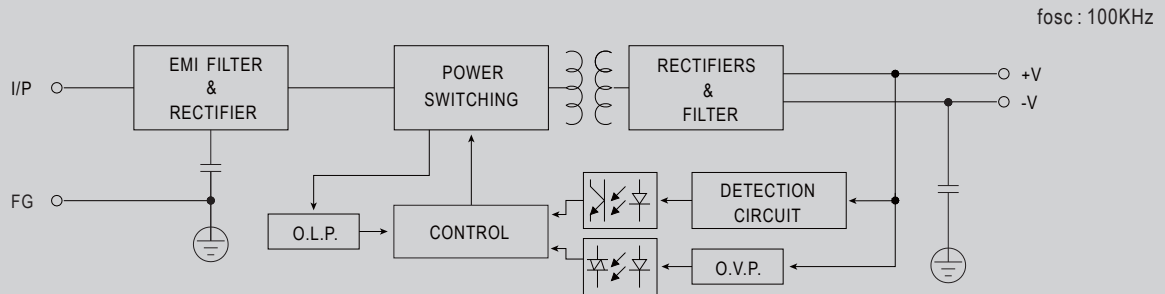
⚡ : Grounding required

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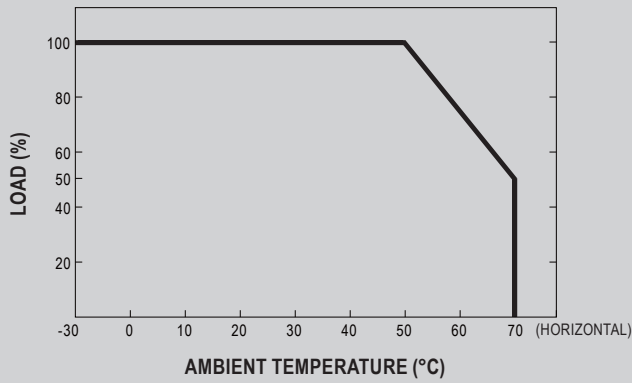
25W Single Output Switching Power Supply



## Block Diagram



## Output Derating



## Static Characteristic

