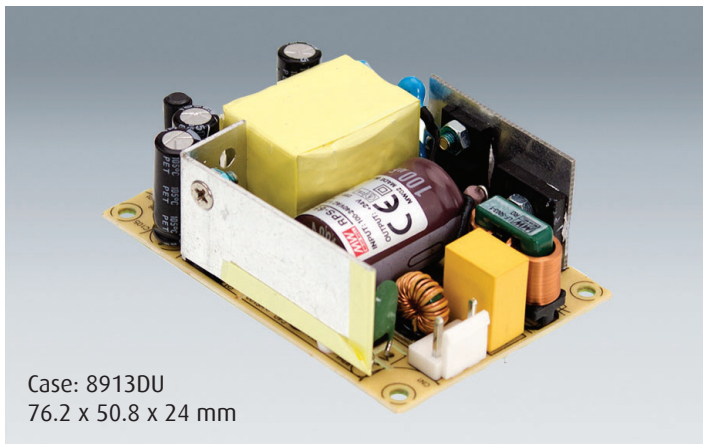


RPS-45 Series

45W Single Output Medical Type



Case: 8913DU
76.2 x 50.8 x 24 mm

Features

- 3" x 2" miniature size
- Universal AC input / Full range
- Class II (without FG) installations
- Medical safety approved (2 x MOPP between primary to secondary)
- Suitable for BF application with appropriate system consideration
- Low Leakage current <100µA
- No load power consumption <0.1W
- High Efficiency up to 91%
- For 1U applications
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- -30 ~ 70°C working temperature range
- LED indicator for power on
- Operating altitude up to 4000 meters
- 3 years warranty

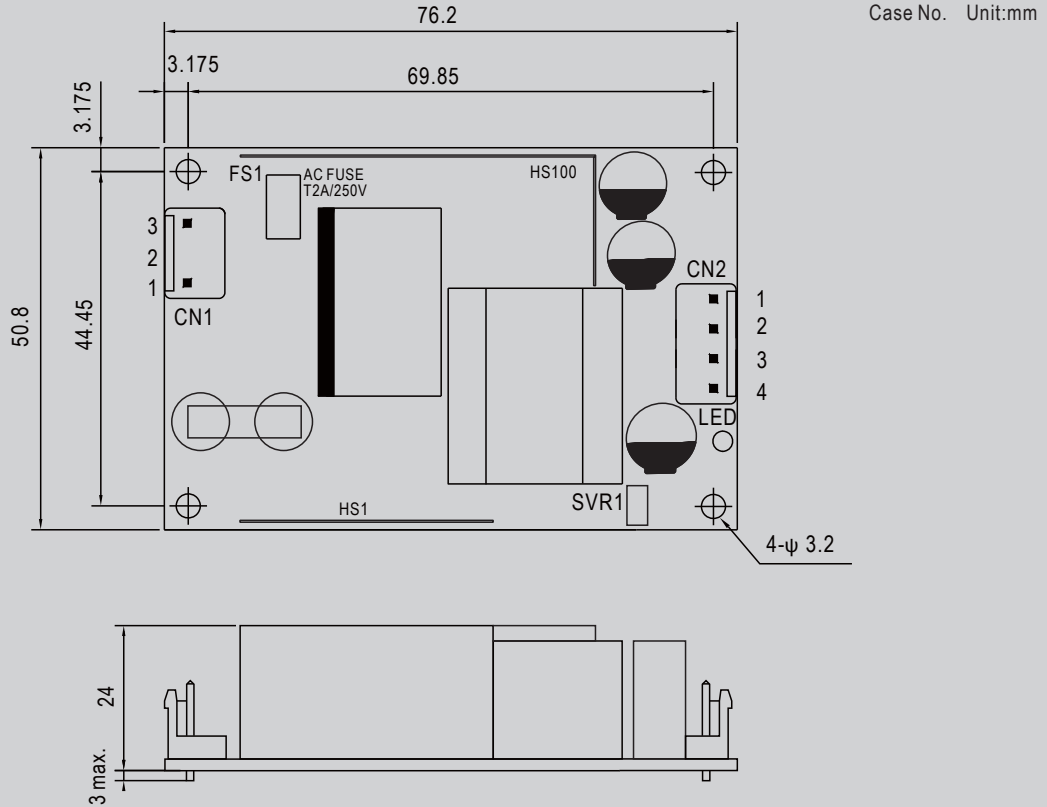


Specification

INPUT	Voltage	80 ~ 264VAC						
	Frequency	47 ~ 63 Hz						
	Efficiency	80.5%	83%	85%	88%	89%	90%	91%
	AC Current (Typ.)	1.2A/115VAC	1A/230VAC					
	Inrush Current (Typ.)	Cold start 30A/115VAC	60A/230VAC					
	Leakage Current (max)	Touch current <100µA/264VAC						
OUTPUT	Model Number	RPS-45-3.3	RPS-45-5	RPS-45-7.5	RPS-45-12	RPS-45-15	RPS-45-24	RPS-45-48
	DC Voltage	3.3V	5V	7.5V	12V	15V	24V	48V
	Rated Current	8A	8A	5.4A	3.8A	3A	1.9A	0.94A
	Current Range	0 ~ 8.8A	0 ~ 8.8A	0 ~ 5.95A	0 ~ 4.18A	0 ~ 3.3A	0 ~ 2.1A	0 ~ 1.03A
	Rated Power (Max.)	26.4W	40W	40.5W	45.6W	45W	45.6W	45.1W
	Peak Load	29W	44W	44.6W	50.2W	49.5W	50.2W	49.4W
	R&N	60mVp-p	60mVp-p	80mVp-p	100mVp-p	100mVp-p	120mVp-p	120mVp-p
	Voltage Adjustment Range	3.1 ~ 3.6V	4.7 ~ 5.5V	7.12 ~ 8.3V	11.4 ~ 13.2V	13.5 ~ 16.5V	22.8 ~ 27.6V	45.6 ~ 52.8V
	Voltage Tolerance	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	Setup, Rise Time	500ms, 30ms/230VAC 500ms, 30ms/115VAC at full load						
	Hold Up Time	30ms/230VAC 12ms/115VAC at full load						
	PROTECTION	Overload	115 ~ 150% rated output power Protection type: hiccup mode, recovers automatically after fault condition is removed					
Over Voltage		3.8 ~ 5V	5.7 ~ 6.8V	8.62 ~ 11.3V	13.8 ~ 16.2V	17.25 ~ 20.3V	28.4 ~ 32.4V	55.2 ~ 64.8V
ENVIRONMENT	Working Temperature	-30 ~ +70°C (Refer to Derating Curve)						
	Working Humidity	20 ~ 90% RH non-condensing						
	Storage Temperature	-40 ~ +85°C, 10 ~ 95% RH						
	Temp. Coefficient	±0.03%/°C (0-50°C)						
	Vibration	10 ~ 500Hz, 2G 10 min./1cycle, period for 60min. each long X, Y, Z axes						
	Operating Altitude	4000 metres						
SAFETY & EMC	Safety Standards	ANSI/AAMI ES60601-1 / TUV EN60601-1 / IEC60601-1 approved						
	Isolation Level	Primary-Secondary: 2xMOPP						
	Withstand Voltage	I/P-O/P:4KVAC						
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC Emission	Compliance to EN55011, (CISPR11) class B, EN61000-3-2,3, Class A						
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN60601-1-2, medical level, criteria A, Level 3, 10V/m(80MHz~2.7GHz)						
OTHERS	MTBF	726.2K hrs min. MIL-HDBK-217 (25°C)						
	Packing	0.11kg; 120pcs/14.2Kg/0.97CUFT						

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, 25°C of ambient temperature.
2. 33% Duty cycle maximum with every 30 seconds. Average output power should not exceed the rated power.
3. Ripple & noise are measured at 20MHz by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
4. Tolerance: includes set up tolerance, line regulation, load regulation.
5. Derating may be needed under low input voltages. Please check the derating curve for more details.
6. Touch current was measured from primary input to DC output.
7. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m (6500ft).
8. The power supply is considered as a component which will be installed into final equipment. 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'.

Mechanical Specification



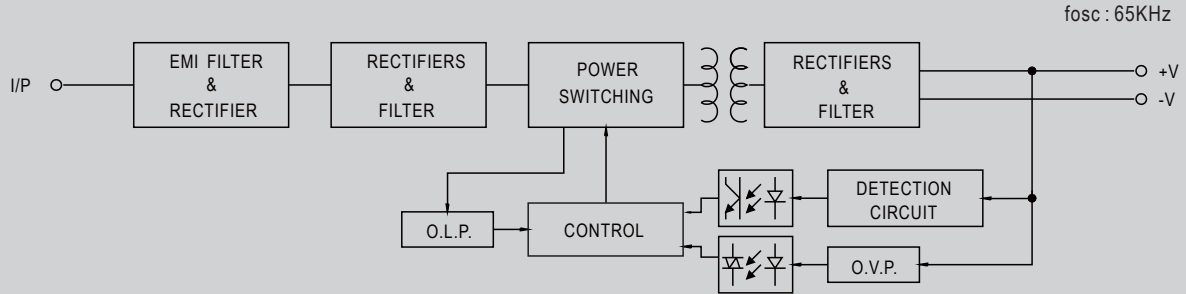
AC Input Connector (CN1) : JST B3P-VH or equivalent

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		

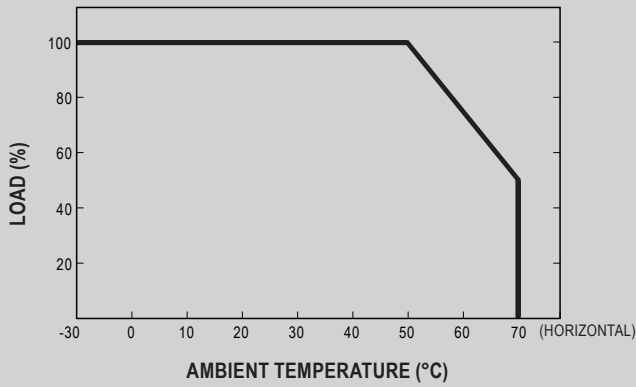
DC Output Connector (CN2) : JST B2P-VH or equivalent

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

Block Diagram



Derating Curve



Static Characteristics

