

## 35W Single Output Switching Power Supply

## PS-35 series



### ■ Features :

- Universal AC input/Full range
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 60KHz
- 2 years warranty

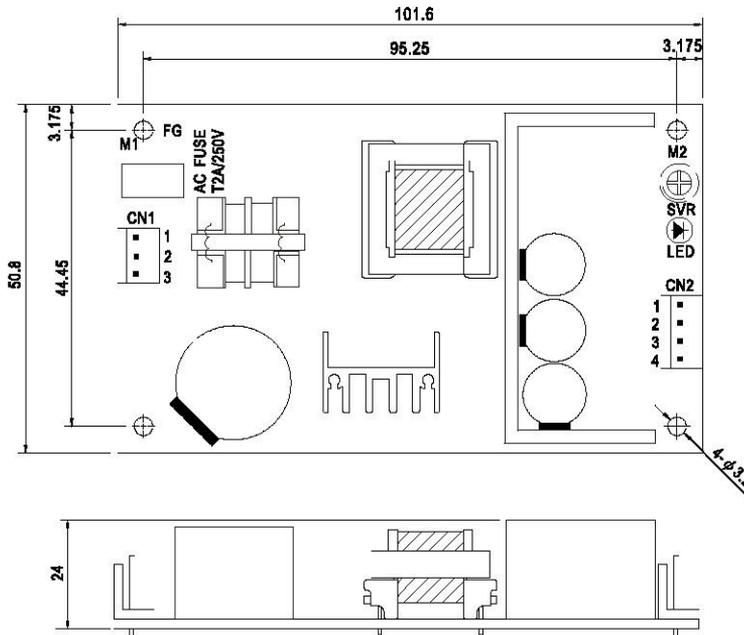


### SPECIFICATION

MODEL	678-3691	130-754	678-3701	130-647	678-3704	130-732	130-748	678-3708		
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	48V	
	RATED CURRENT	6A	6A	4.7A	3A	2.6A	2.4A	1.5A	0.75A	
	CURRENT RANGE	0 ~ 6A	0 ~ 6A	0 ~ 4.7A	0 ~ 3A	0 ~ 2.6A	0 ~ 2.4A	0 ~ 1.5A	0 ~ 0.75A	
	RATED POWER	19.8W	30W	35.25W	36W	35.1W	36W	36W	36W	
	RIPPLE & NOISE (max.) <small>Nota.2</small>	80mVp-p	100mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	10.8 ~ 13.2V	12.15 ~ 14.85V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V	
	VOLTAGE TOLERANCE <small>Nota.3</small>	±2.0%	±2.0%	±2.0%	±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%	
	LOAD REGULATION	±1%	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1200ms, 30ms/230VAC,1200ms,30ms/115VAC at full load								
HOLD TIME (Typ.)	50ms/230VAC,10ms/115VAC at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC		127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 440Hz								
	EFFICIENCY(Typ.)	70%	78%	80%	81%	81%	81%	85%	84%	
	AC CURRENT (Typ.)	0.75A/115VAC		0.5A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 23A/115VAC		45A/230VAC						
LEAKAGE CURRENT	<2mA / 240VAC									
PROTECTION	OVER LOAD	105 ~ 150% rated output power (3.3V:105 ~ 160% rated output power) Protection type : Hiccup mode, recovers automatically after fault condition is removed.								
	OVER VOLTAGE	3.8 ~ 4.95V	5.75 ~ 6.75V	8.63 ~ 10.5V	13.8 ~ 16.2V	15.5 ~ 18.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	55.2 ~ 62.4V	
ENVIRONMENT	WORKING TEMP.	-20 ~ +65°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes								
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	UL60950, TUV EN60950-1 Approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3								
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A								
	MTBF	588.8Khrs								
	DIMENSION	101.6*50.8*24mm (L*W*H)								
NOTE	PACKING	0.124Kg;96PCS/12.9Kg/0.8CUFT								
		<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>								

**Mechanical Specification**

Unit:mm



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

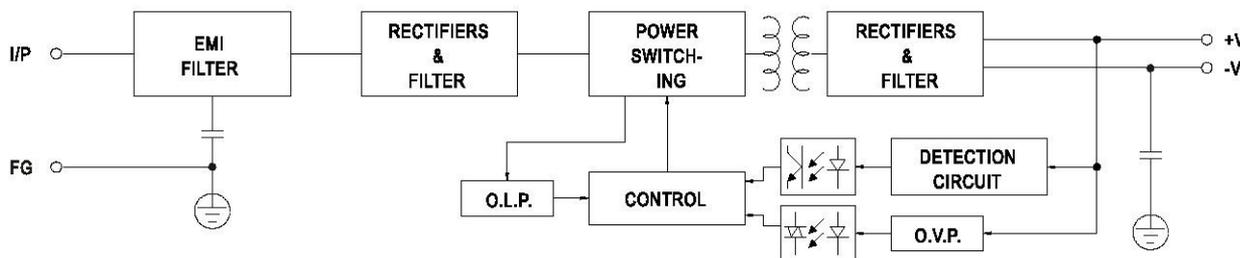
Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3	AC/N		
2	NC		

DC Output Connector (CN2) : JST B4P-VH-B or equivalent

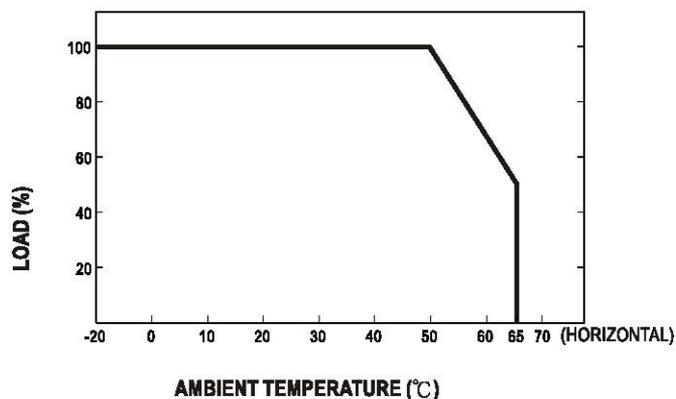
Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	-V		

**Block Diagram**

fosc : 60KHz



**Derating Curve**



**Output Derating VS Input Voltage**

