



#### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 1.8"x2.5" compact size
- No load power consumption<0.3W
- Operating altitude up to 3000 meters
- 3 years warranty









#### **SPECIFICATION**

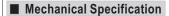
MODEL		EPS-15-3.3	EPS-15-5	EPS-15-7.5	EPS-15-12	EPS-15-15	EPS-15-24	EPS-15-27	EPS-15-36	EPS-15-48
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V
	RATED CURRENT	3A	3A	2A	1.25A	1A	0.625A	0.56A	0.42A	0.313A
	CURRENT RANGE	0 ~ 3.3A	0 ~ 3.3A	0 ~ 2.2A	0 ~ 1.38A	0 ~ 1.1A	0~0.69A	0 ~ 0.615A	0~0.46A	0~0.344A
	RATED POWER	9.9W	15W	15W	15W	15W	15W	15.12W	15.12W	15.02W
	PEAK LOAD(10sec.) Note.6	10.89W	16.5W	16.5W	16.56W	16.5W	16.56W	16.6W	16.56W	16.51W
OUTDUT	RIPPLE & NOISE (max.) Note.2	50mVp-p	50mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	180mVp-p	200mVp-p	200mVp-p
OUTPUT	VOLTAGE ADJ. 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 Note.3	±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%
	SETUP, RISE TIME	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load								
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load								
INPUT	VOLTAGE RANGE Note.5	85 ~ 264VAC 120 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	75%	78%	81%	82%	83%	83%	84%	85%	85%
	AC CURRENT (Typ.)	0.4A/115VAC 0.2A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 45A/230VAC								
	LEAKAGE CURRENT	<1mA/240VAC								
	OVERLOAD	115 ~ 150% rated output power								
	OVER LOAD	Protection type : Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION		3.8 ~ 4.85V   5.6 ~ 6.75V   8.63~ 10.1V   13.8 ~ 16.2V   17.25 ~ 20.25V   27.6 ~ 33V   31.05 ~ 36.45V   39.7 ~ 46.8V   55.2 ~ 65.8V								
	OVER VOLTAGE	Protection type: Shut down o/p voltage, Clamping by zener diode								
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH								
ENVIRONMENT	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)								
	OPERATING ALTITUDE Note.7	3000 meters								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
	SAFETY STANDARDS	UL62368-1, TUV EN62368-1, EAC TP TC 004, CCC GB4943.1 approved								
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
EMC (Note 4)	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, EAC TP TC 020, GB9254 Class B, GB17625.1								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A, EAC TP TC 020								
	MTBF	824.6Khrs min. MIL-HDBK-217F (25°C)								
OTHERS	DIMENSION	63.5*45.7*24	mm (L*W*H)							
	PACKING	0.057Kg; 120pcs/ 7.84Kg/0.97CUFT								
NOTE		ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.								
	2. Ripple & noise are measure	ured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.								

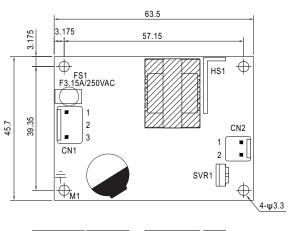
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47 uf parallel capacitor.
   Tolerance: includes set up tolerance, line regulation and load regulation.
   The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets
- 5. Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.

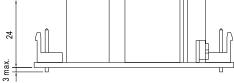
  7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

Unit:mm









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

	,	,		
Pin No.	Assignment	Mating Housing	Terminal	
1	AC/L(+)	JST VHR	JST SVH-21T-P1.1	
2	No Pin	or equivalent	or equivalent	
3	AC/N(-)		3. 545.7410111	

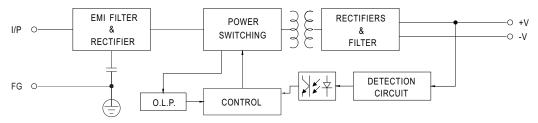
± : Grounding Required M1 is safety ground

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

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

# ■ Block Diagram

fosc: 65KHz



# **■** Output Derating

# ■ Static Characteristics

