



60W Single Output LED Power Supply

PLP-60 series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Built-in active PFC function
- Cooling by free air convection
- No minimum load requirement
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- 2 years warranty

SELV
EQUIVALENT (except for 48V)



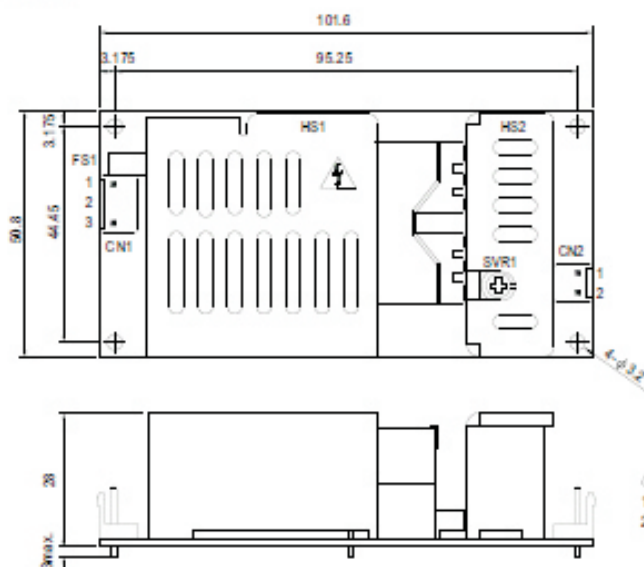
SPECIFICATION

MODEL	711-6685	711-6688	711-6682	
OUTPUT	DC VOLTAGE	12V	24V	48V
	CONSTANT CURRENT REGION <small>Note.5</small>	9 ~ 12V	18 ~ 24V	36 ~ 48V
	RATED CURRENT	5A	2.5A	1.3A
	CURRENT RANGE	0 ~ 5A	0 ~ 2.5A	0 ~ 1.3A
	RATED POWER	60W	60W	62.5W
	RIPPLE & NOISE (max.) <small>Note.2</small>	4.5Vp-p	4.5Vp-p	4.8Vp-p
	CURRENT ADJ. RANGE	3.75 ~ 5A	1.875 ~ 2.5A	0.975 ~ 1.3A
	VOLTAGE TOLERANCE <small>Note.3</small>	±10%		
	LINE REGULATION	±3.0%		
	LOAD REGULATION	±5.0%		
SETUP TIME	1000ms / 230VAC 2000ms / 115VAC at full load			
INPUT	VOLTAGE RANGE	90 ~ 264VAC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR	PF ≥ 0.9 at 75 ~ 100% load, 115VAC / 230VAC		
	EFFICIENCY (Typ.)	84%	88%	89%
	AC CURRENT	0.8A/115VAC 0.4A/230VAC		
	INRUSH CURRENT(max.)	42A/230VAC		
	LEAKAGE CURRENT	< 0.75mA / 240VAC		
PROTECTION	OVER CURRENT <small>Note.5</small>	105 ~ 115% Protection type: Constant current limiting, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Protection type: Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	14 ~ 16V	28 ~ 35V	57 ~ 63V
		Protection type: Shutdown o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to output load derating curve)		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)		
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS	Design refer to TUV EN61347-1, EN61347-2-13, UL80950-1		
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC I/P-FG: 1.88KVAC O/P-FG: 0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH		
	EMI CONDUCTION & RADIATION	Compliance to EN55015		
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (≥ 75% load); EN61000-3-3		
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN55024, EN61547, light industry level, criteria A		
	MTBF	583.3Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	101.6*50.8*28mm (L*W*H)		
	PACKING	0.16Kg 96pcs/16.4Kg/0.89CUFT		
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor, direct connecting to LED's is not suggested for models with CURRENT "RIPPLE & NOISE" > ±10% and using additional drivers is highly recommended.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>5. Constant current operation region is within 75% ~ 100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</p> <p>6. Heat sink HS1, HS2 can not be shorted.</p> <p>7. Heat sink HS1 must have safety isolation distance with system case.</p>			



■ Mechanical Specification

Unit:mm



- ⚠ 1.HS1,HS2 can not be shorted.
- ⚠ 2.HS1 must have safety isolation distance with system case.

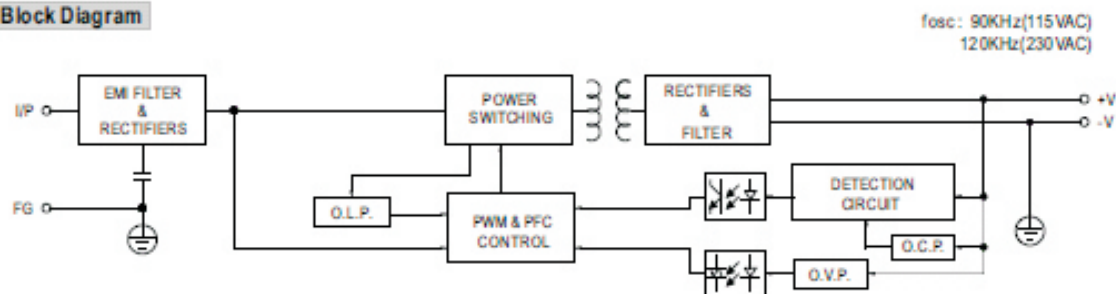
AC Input Connector (CN1) : JST B3P-VH or equivalent

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

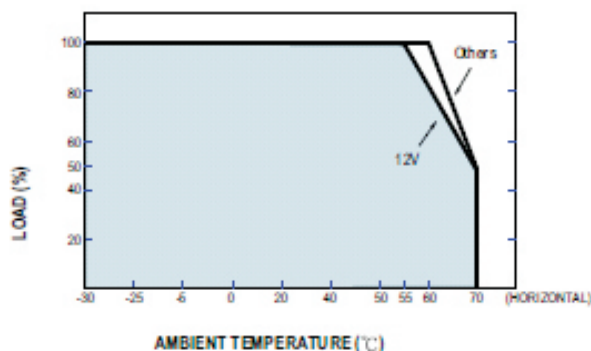
DC Output Connector (CN2) : JST B2P-VH or equivalent

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

■ Block Diagram



■ Derating Curve



■ Static Characteristics

