






## 20W Single Output Switching Power Supply

## LPC-20 series



## ■ Features :

- Constant current mode power supply
- Universal AC input / Full range
- Epoxy encapsulated with IP67 level
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over current / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- UL1310 Class 2 power unit, pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- 2 years warranty

LPS IP67  (for 48V only)  US (except for 48V) 

## SPECIFICATION

MODEL		LPC-20-350	LPC-20-700
OUTPUT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	3 ~ 48V	3 ~ 30V
	RATED POWER	16.8W	21W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±2.0%	
	SETUP, RISE TIME Note.6	500ms, 250ms / 230VAC	500ms, 250ms / 115VAC at full load
	HOLD UP TIME (Typ.)	50ms/230VAC	24ms/115VAC at full load
INPUT	VOLTAGE RANGE	90 ~ 264VAC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	83%	
	AC CURRENT	0.55A/115VAC 0.35A/230VAC	
	INRUSH CURRENT(max.)	COLD START 35A/115VAC 70A/230VAC	
PROTECTION	LEAKAGE CURRENT	0.25mA / 240VAC	
	CURRENT LIMIT Note.4	±5% rated output current Protection type : Constant current limiting type	
	OVER VOLTAGE	50.4 ~ 60V Protection type : Shut off o/p voltage, clamping by zener diode	31.5 ~ 40.5V
ENVIRONMENT	WORKING TEMP.	-30~ +70°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91(except for 48V), IP67 approved, design refer to TUV EN60950-1, EN61347-2-13	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH	
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B	
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A	
OTHERS	MTBF	786.5Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	118*35*26mm (L*W*H)	
	PACKING	0.22Kg; 60pcs/14.2Kg/0.62CUFT	
NOTE	<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. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>5. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> </ol>		

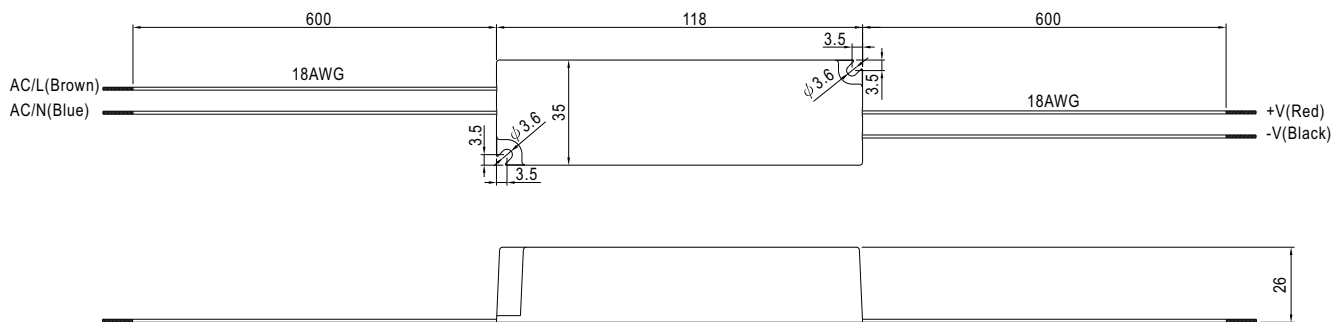


20W Single Output Switching Power Supply

LPC-20 series

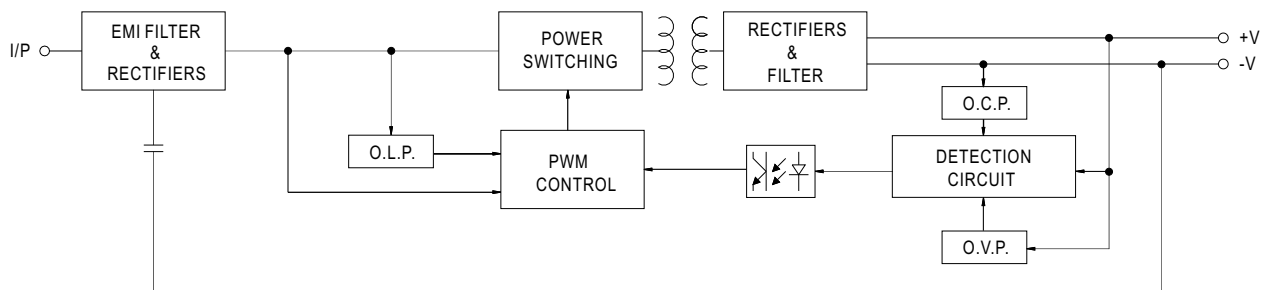
**Mechanical Specification**

Case No. 972A Unit:mm

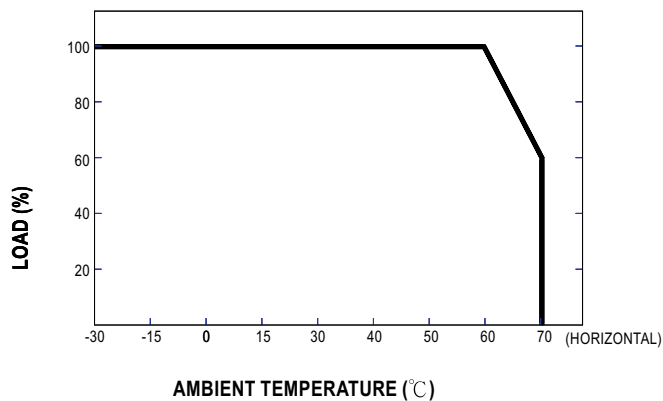


**Block Diagram**

fosc : 60KHz



**Derating Curve**



**Static Characteristics**

