

## 18W Single Output Switching Power Supply

# LPL-18 series



#### Features:

- 90-132VAC input only
- Fully encapsulated with IP67 level
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Cooling by free air convection
- Pass LPS
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- High reliability/Low cost
- 2 years warranty

### **SPECIFICATION**

# LPS IP67 FC ( E(LVD)

| MODEL           |  | LPL-18-12  | LPL-18-24                                | LPL-18-36              |
|-----------------|--|--|--|------------------------|
| 1.0             | DC VOLTAGE   | 12V  | 24V                                      | 36V                    |
| ОИТРИТ          | RATED CURRENT  | 1.5A   | 0.75A                                    | 0.5A                   |
|                 | CURRENT RANGE  | 0 ~ 1.5A   | 0 ~ 0.75A                                | 0~0.5A                 |
|                 | RATED POWER  | 18W  | 18W                                      | 18W                    |
|                 | RIPPLE & NOISE (max.) Note.2   | 120mVp-p   | 150mVp-p                                 | 200mVp-p               |
|                 | VOLTAGE TOLERANCE Note.3   | ±3.0%  | 100 11 - 1                               |                        |
|                 | LINE REGULATION  | ±1.0%  | 60//(6)                                  |                        |
|                 | LOAD REGULATION  | ±2.0%  |  |                        |
|                 | SETUP, RISE TIME   | 1500ms, 30ms / 115VAC  |  |                        |
|                 | HOLD UP TIME (Typ.)  | 20ms/115VAC at full load   |  |                        |
| INPUT           | VOLTAGE RANGE  | 90 ~ 132VAC  |  |                        |
|                 | FREQUENCY RANGE  | 47 ~ 63Hz  |  |                        |
|                 | EFFICIENCY(Typ.)   | 80%  | 83%                                      | 84%                    |
|                 | AC CURRENT   | 0.5A/115VAC  |  |                        |
|                 | INRUSH CURRENT(max.)   | Cold start 40A/115VAC  |  |                        |
|                 | LEAKAGE CURRENT  | 0.25mA / 115VAC  |  | T nZ5                  |
| PROTECTION      | OVER CURRENT   | Above 105% rated output power  |  |                        |
|                 |  | Protection type: Hiccup mode, recovers automatically after fault condition is removed  |  |                        |
|                 | OVER VOLTAGE   | 13.8~ 16.2V  | 27.6~ 32.4V                              | 41.4 ~ 48.6V           |
|                 |  | Protection type: Shut off o/p voltage, clamping by zener diode   |  |                        |
|                 | OVER TEMPERATURE   | Tj 140°C typically (U1) detect on main control IC  |  |                        |
|                 |  | Protection type :Shut down, recovers automatically after temperature goes down   |  |                        |
| ENVIRONMENT     | WORKING TEMP.  | -25 ~ 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 &<br>EMC | SAFETY STANDARDS   |  | 950-1, EN61347-2-13, CAN/CSA C22.2 No. 2 | 223-M91, IP67 approved |
|                 | 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, FCC Part 15   |  |                        |
|                 | 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   | 1207.4Khrs min. MIL-HDBK-217F(25°C)  |  |                        |
|                 | DIMENSION  | 140*30*20(L*W*H)   |  |                        |
|                 | PACKING  | 0.175Kg; 70pcs/13.3Kgs/0.66CUFT  |  |                        |
| NOTE            | All parameters NOT specia     Ripple & noise are measure     Tolerance : includes set up | ally mentioned are measured at 115VAC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  dered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets |  |                        |

4. 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 directive



