



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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### ■ Features :

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over load / Over voltage
- Cooling by free air convection
- Small and compact size
- Fully encapsulated with IP67 level (Note.7)
- Fully isolated plastic case
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



### SPECIFICATION

| MODEL               | LPV-20-5  | LPV-20-12   | LPV-20-15    | LPV-20-24  |           |
|---------------------|---|---|--------------|------------|-----------|
| OUTPUT              | DC VOLTAGE  | 5V  | 12V          | 15V        | 24V       |
|                     | RATED CURRENT   | 3A  | 1.67A        | 1.33A      | 0.84A     |
|                     | CURRENT RANGE   | 0 ~ 3A  | 0 ~ 1.67A    | 0 ~ 1.33A  | 0 ~ 0.84A |
|                     | RATED POWER   | 15W   | 20W          | 20W        | 20.2W     |
|                     | RIPPLE & NOISE (max.) Note.2  | 80mVp-p   | 120mVp-p     | 120mVp-p   | 150mVp-p  |
|                     | VOLTAGE TOLERANCE Note.3  | ±5.0%   |              |            |           |
|                     | LINE REGULATION   | ±1.0%   |              |            |           |
|                     | LOAD REGULATION   | ±2.0%   |              |            |           |
|                     | SETUP, RISE TIME Note.6   | 500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load  |              |            |           |
| HOLD UP TIME (Typ.) | 50ms/230VAC 16ms/115VAC at full load  |   |              |            |           |
| INPUT               | VOLTAGE RANGE Note.4  | 90 ~ 264VAC   | 127 ~ 370VDC |            |           |
|                     | FREQUENCY RANGE   | 47 ~ 63Hz   |              |            |           |
|                     | EFFICIENCY (Typ.)   | 77%   | 81%          | 83%        | 83%       |
|                     | AC CURRENT (Typ.)   | 0.55A/115VAC 0.35A/230VAC   |              |            |           |
|                     | INRUSH CURRENT(Typ.)  | COLD START 70A(twidth=215µs measured at 50% Ipeak) at 230VAC  |              |            |           |
|                     | MAX. No. of PSUs on 16A CIRCUIT BREAKER   | 8 units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC                                    |              |            |           |
| LEAKAGE CURRENT     | 0.25mA / 240VAC   |   |              |            |           |
| PROTECTION          | OVER LOAD   | 110 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |            |           |
|                     | OVER VOLTAGE  | 5.75 ~ 6.75V  | 13.8 ~ 16V   | 17.5 ~ 21V | 28 ~ 32V  |
| ENVIRONMENT         | WORKING TEMP.   | -30 ~ +70°C (Refer to "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  | UI879, UL1310, CSA C22.2 No. 207-M89,CAN/CSA C22.2 No. 223-M91,TUV EN60950-1,EAC TP TC 004,IP67 approved                |              |            |           |
|                     | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC   |              |            |           |
|                     | ISOLATION RESISTANCE  | I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH  |              |            |           |
|                     | EMC EMISSION  | Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A, EN61000-3-3,EAC TP TC 020                                 |              |            |           |
| OTHERS              | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A,EAC TP TC 020                         |              |            |           |
|                     | MTBF  | 786.5Khrs min. MIL-HDBK-217F (25°C)   |              |            |           |
| OTHERS              | 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 0.1µf &amp; 47µf 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 static characteristics for more details.</li> <li>5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</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> <li>7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.</li> <li>8. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.</li> </ol> |   |              |            |           |

