

- Features :
- Universal AC input / Full range
 - Built-in active PFC function, PF>0.95
 - Protections: Short circuit/Over load/Over voltage/Over temperature
 - Cooling by free air convection
 - High power density 8.5w/in³
 - 100% full load burn-in test
 - No load power consumption <1W@240VAC
 - ZCS/ZVS technology to reduce power dissipation
 - 2 years warranty

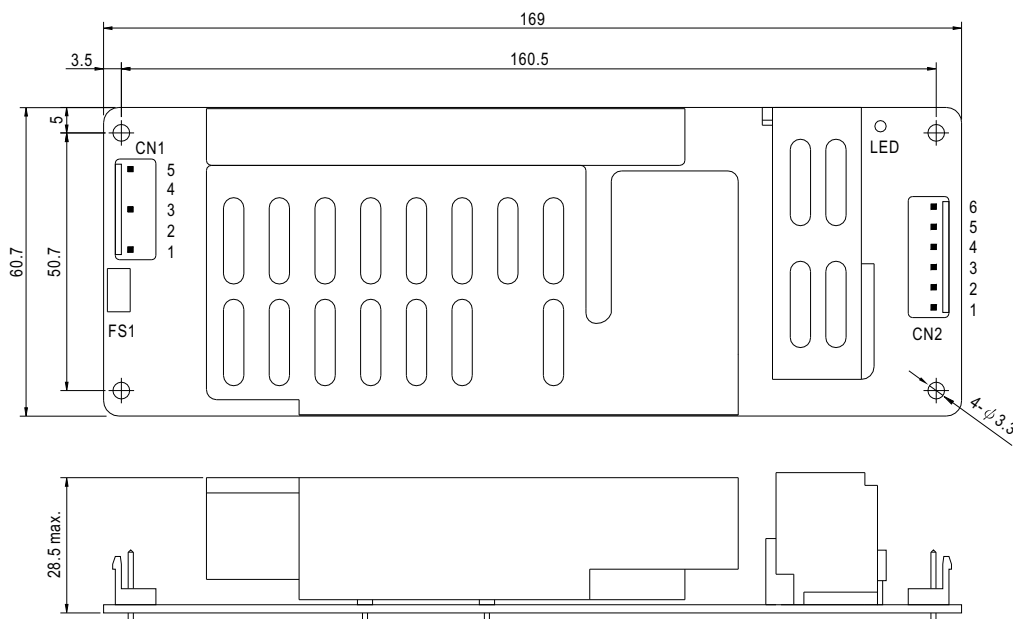
CBC E

SPECIFICATION

| MODEL | | ASP-150-12 | ASP-150-15 | ASP-150-20 | ASP-150-24 | ASP-150-48 |
|-----------------------|--|---|---------------|------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 12V | 15V | 20V | 24V | 48V |
| | RATED CURRENT | 11A | 9.5A | 7.5A | 6.3A | 3.2A |
| | CURRENT RANGE | 0 ~ 11A | 0 ~ 9.5A | 0 ~ 7.5A | 0 ~ 6.3A | 0 ~ 3.2A |
| | RATED POWER | 132W | 142.5W | 150W | 151.2W | 153.6W |
| | RIPPLE & NOISE (max.) Note.2 | 150mVp-p | 180mVp-p | 200mVp-p | 240mVp-p | 240mVp-p |
| | VOLTAGE ADJ. RANGE | 11 ~ 13.2V | 14 ~ 17V | 17 ~ 22V | 22 ~ 27V | 45.6 ~ 52.8V |
| | | Fixed output by customer choose | | | | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% |
| SETUP, RISE TIME | 3000ms, 80ms at full load | | | | | |
| HOLD TIME (Typ.) | 50ms/230VAC 16ms/115VAC at full load | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 127 ~ 370VDC | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | |
| | POWER FACTOR (Typ.) | PF ≥ 0.95/230VAC PF ≥ 0.98/115VAC at full load | | | | |
| | EFFICIENCY (Typ.) | 88% | 88% | 90% | 90% | 89% |
| | AC CURRENT (Typ.) | 2A/115VAC 1A/230VAC | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 80A/230VAC | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | |
| PROTECTION | OVER LOAD | 105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | |
| | OVER VOLTAGE | 13.7 ~ 16.2V | 17.5 ~ 20.25V | 22.5 ~ 28V | 27.5 ~ 32.4V | 53.3 ~ 64.8V |
| | OVER TEMPERATURE | 90°C ±15°C (RTH2) Detect on heatsink of power transistor Protection type : Shut down o/p voltage, re-power on to recover | | | | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +60°C with cooling FAN (Refer to output load derating curve) | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | |
| | TEMP. COEFFICIENT | ±0.05%/°C (0 ~ 50°C) | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | Design refer to UL60950-1, TUV EN60950-1 | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4.25KVDC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | |
| OTHERS | EMM IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, Light industry level, criteria A | | | | |
| | MTBF | 149.3Khrs min. MIL-HDBK-217F (25°C) | | | | |
| | DIMENSION | 169*60.7*28.5mm (L*W*H) | | | | |
| | PACKING | 0.32Kg; 48pcs/15.8Kg/0.85CUFT | | | | |
| 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 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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 EMC directives.</p> | | | | | |

Mechanical Specification

Unit:mm



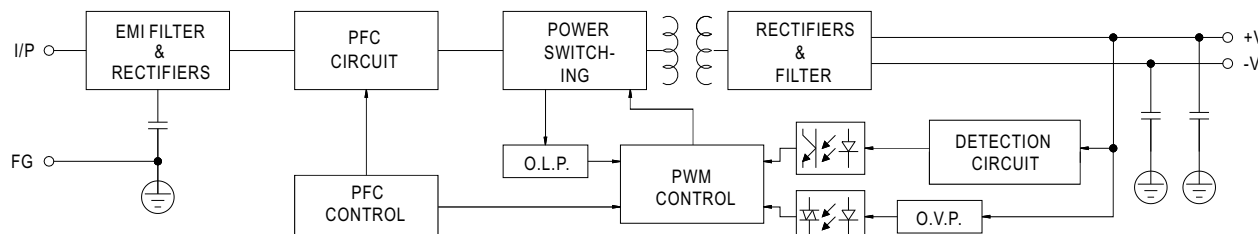
AC Input Connector (CN1) : JST B5P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/L | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2,4 | No Pin | | |
| 3 | AC/N | | |
| 5 | FG \perp | | |

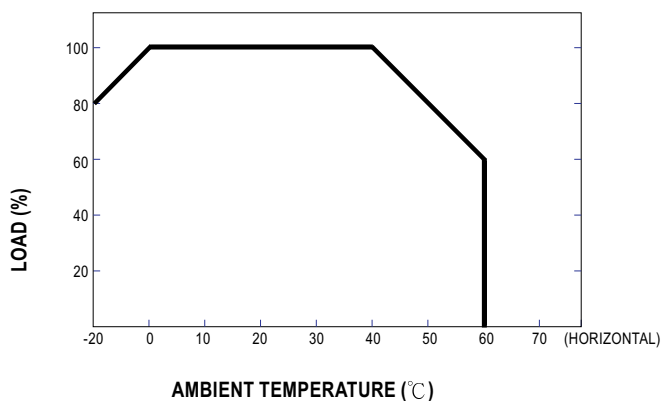
DC Output Connector (CN2) : JST B6P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1,2,3 | -V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 4,5,6 | +V | | |

Block Diagram



Derating Curve



Output Derating VS Input Voltage

