



E-Star Power Development Co., Ltd. (E-STAR)
 1F, No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City
 22069, Taiwan (R.O.C.)
 Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

25W LED Driver power supply < APC-25



■ Features :

- Constant current mode power supply
- Universal AC input / Full range
- Withstand 300VAC Surge input for 5 seconds
- Protections: Short circuit / Over voltage
- Fully isolated plastic case
- Small and compact size
- Cooling by free air convection
- IP42 design
- 100% full load burn-in test
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- Low cost / High reliability
- 2 years warranty

IS 15885 (Part 2/Sec13)
 R-41027766



(only for APC-25-500)



(only for APC-25-700&1050)

IP42 LPS

(except for APC-25-350)



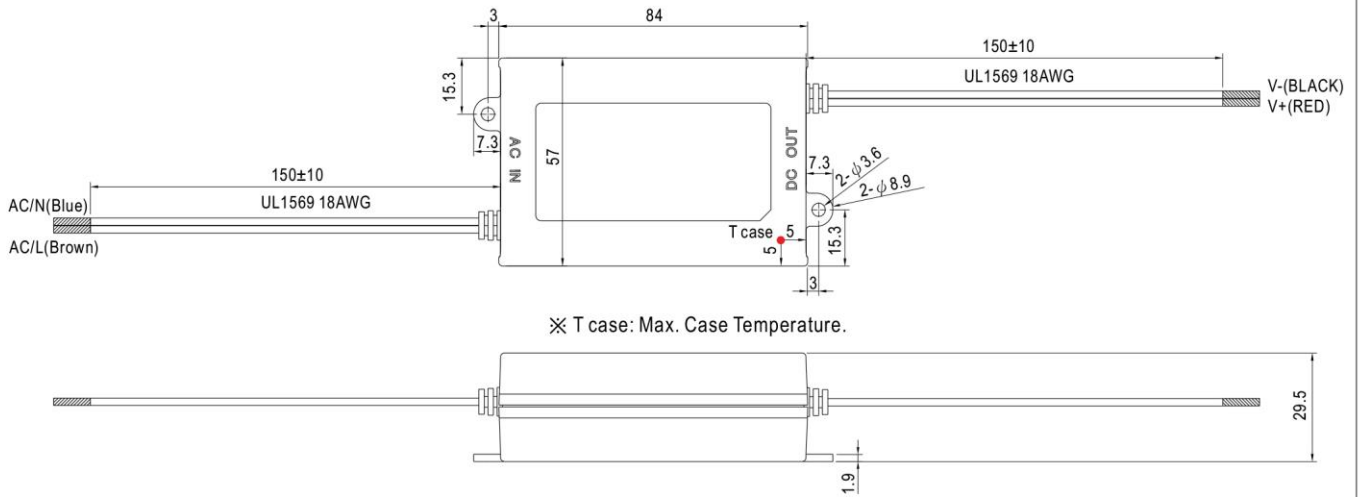
SPECIFICATION

| MODEL | | APC-25-350 | APC-25-500 | APC-25-700 | APC-25-1050 |
|-----------------------|---|---|--------------------------|------------------------------------|-------------|
| OUTPUT | RATED CURRENT | 350mA | 500mA | 700mA | 1050mA |
| | DC VOLTAGE RANGE | 25~70V | 15~50V | 11~36V | 9~24V |
| | RATED POWER | 24.5W | 25.2W | 25.2W | 25.2W |
| | RIPPLE & NOISE (max.) Note.2 | 300mVp-p | 300mVp-p | 300mVp-p | 300mVp-p |
| | VOLTAGE TOLERANCE Note.3 | ±5.0% | | | |
| | CURRENT ACCURACY | ±8.0% | | | |
| | LINE REGULATION | ±1.0% | | | |
| | LOAD REGULATION | ±3.0% | | | |
| | SETUP, RISE TIME | 1500ms, 30ms / 230VAC | | 1500ms, 30ms / 115VAC at full load | |
| | HOLD UP TIME (Typ.) | 20ms/230VAC | 12ms/115VAC at full load | | |
| INPUT | VOLTAGE RANGE Note.4 | 90 ~ 264VAC | 127 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | EFFICIENCY(Typ.) | 83% | 83% | 83% | 83% |
| | AC CURRENT | 0.4A/230VAC; 0.8A/115VAC | | | |
| | INRUSH CURRENT(Typ.) | COLD START 45A(twidth=310μs measured at 50% Ipeak) at 230VAC | | | |
| | MAX. No. of PSUs on 16A CIRCUIT BREAKER | 9 units (circuit breaker of type B) / 15 units (circuit breaker of type C) at 230VAC | | | |
| PROTECTION | LEAKAGE CURRENT | 0.25mA / 240VAC | | | |
| | OVER VOLTAGE | 76 ~ 94V | 55 ~ 68V | 41 ~ 49V | 27 ~ 35V |
| 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 | ±0.2%/°C (0 ~ 50°C) | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS | UL8750 (except for APC-25-350), CSA-C22.2 No. 250.0-13 (only for APC-25-700&1050), IP42 approved; design refer to EN60950-1 | | | |
| | 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, EN61000-3-2 Class A, EN61000-3-3 | | | |
| OTHERS | EMC IMMUNITY | Compliance to EN55024, EN61000-4-2, 3, 4, 5, 6, 8, 11; light industry level (surge 2KV), criteria A | | | |
| | MTBF | 518.9K hrs min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 84*57*29.5(L*W*H) | | | |
| NOTE | PACKING | 0.13Kg; 72pcs/10.4Kg/0.92CUFT | | | |
| | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltage. Please check the static characteristic for more details. 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. 6. 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. | | | | |

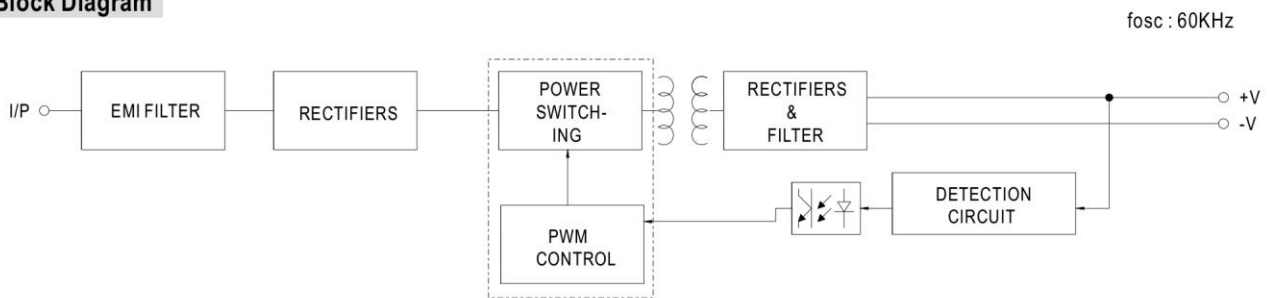
25W LED Driver power supply < APC-25

Mechanical Specification

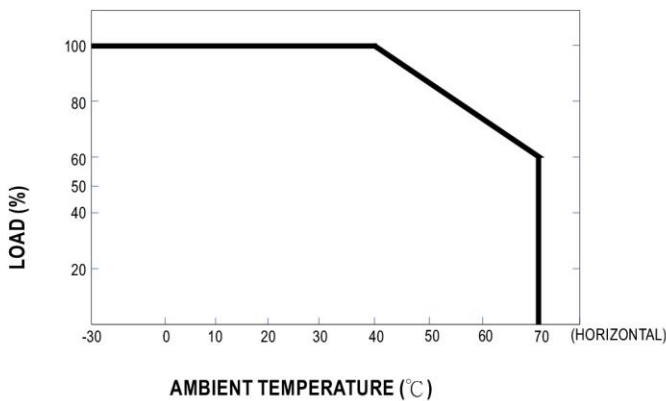
Case No.PCD16A Unit:mm



Block Diagram



Derating Curve



Static Characteristics

