# 16W Single Output Switching Power Supply

# APC-16 series

## Features :

- Constant current mode design
- Universal AC input / Full range
- Protections:Short circuit / Over voltage
- Fully isolated plastic case
- Small and compact size
- Cooling by free air convection
- Pass LPS
- Suitable for LED lighting and moving sign applications
- 100% full load burn-in test
- Low cost / High reliability
- 2 years warranty

SELV LPS

## SPECIFICATION

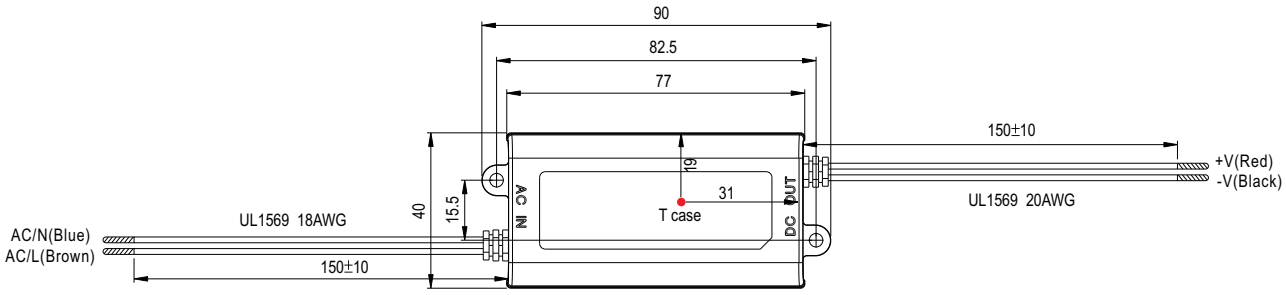
| MODEL | | APC-16-350 | APC-16-700 |
|---|---|---|---|
| OUTPUT | RATED CURRENT | 350mA | 700mA |
| | DC VOLTAGE RANGE | 12~48V | 9~24V |
| | RATED POWER | 16.8W | 16.8W |
| | RIPPLE & NOISE (max.) Note.2 | 300mVp-p | 250mVp-p |
| | VOLTAGE TOLERANCE Note.3 | ±5.0% | |
| | CURRENT ACCURACY | ±5.0% | |
| | LINE REGULATION | ±1.0% | |
| | LOAD REGULATION | ±3.0% | |
| | SETUP, RISE TIME | 3000ms, 200ms / 230VAC 3000ms, 200ms / 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.) | 84% | 83% |
| | AC CURRENT | 0.3A/230VAC;0.5A/115VAC | |
| | INRUSH CURRENT(max.) | Cold start 35A/115VAC,70A/230VAC | |
| | LEAKAGE CURRENT | 0.25mA / 240VAC | |
| PROTECTION | OVER VOLTAGE | 50.4~ 60V | 27.6~ 33.5V |
| | | Protection type : Shut off o/p voltage, clamping by zener diode | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ 70℃(Refer to "Derating Curve") | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +80℃, 10 ~ 95% RH | |
| | TEMP. COEFFICIENT | ±0.2%/℃ (0 ~ 50℃) | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS | Design refer to TUV EN60950-1, EN61347-2-13, UL8750 | |
| | WITHSTAND VOLTAGE | I/P-O/P:3.75KVAC | |
| | ISOLATION RESISTANCE | I/P-O/P:>100M Ohms / 500VDC / 25℃/ 70% RH | |
| | EMC EMISSION | Compliance to EN55015,EN61000-3-2 Class A,EN61000-3-3 | |
| | EMC IMMUNITY | Compliance to EN61547,EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A | |
| OTHERS | MTBF | 1145.7K hrs min. MIL-HDBK-217F (25 ) | |
| | DIMENSION | 77*40*29(L*W*H) | |
| | PACKING | 0.1Kg; 120pcs/14Kg/0.93CUFT | |

NOTE

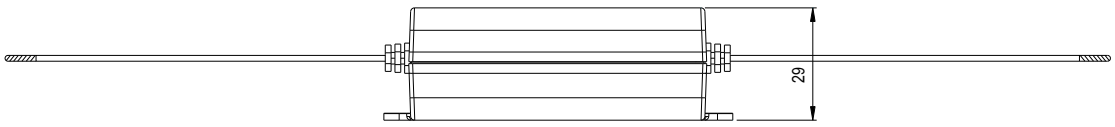
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation 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.

## ■ Mechanical Specification

Unit:mm

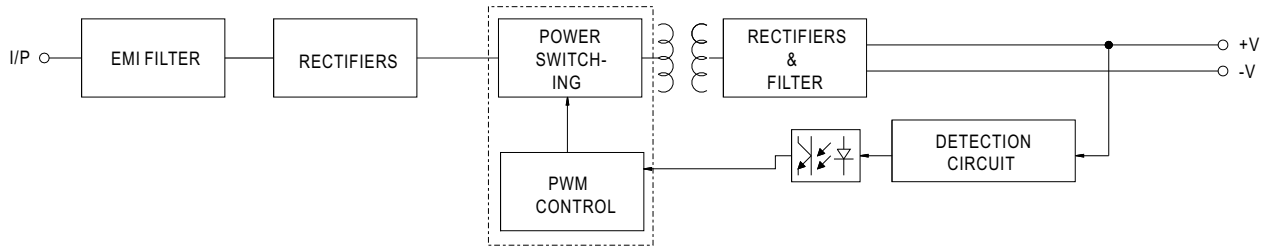



※ T case: Max. Case Temperature

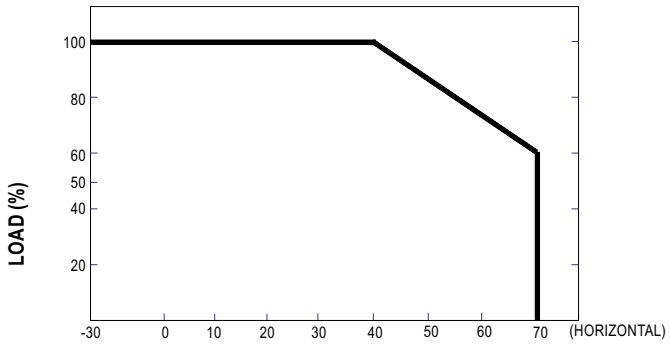



## ■ Block Diagram

fosc : 67KHz

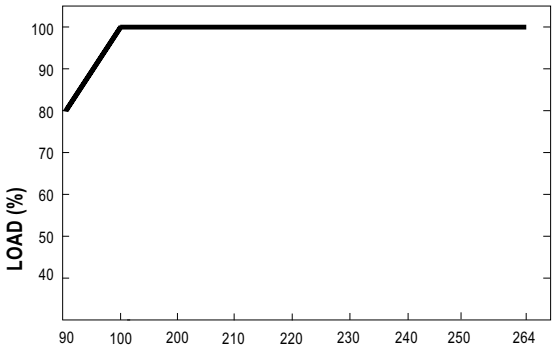



## ■ Derating Curve




AMBIENT TEMPERATURE (℃)

## ■ Static Characteristics




INPUT VOLTAGE (VAC) 60Hz