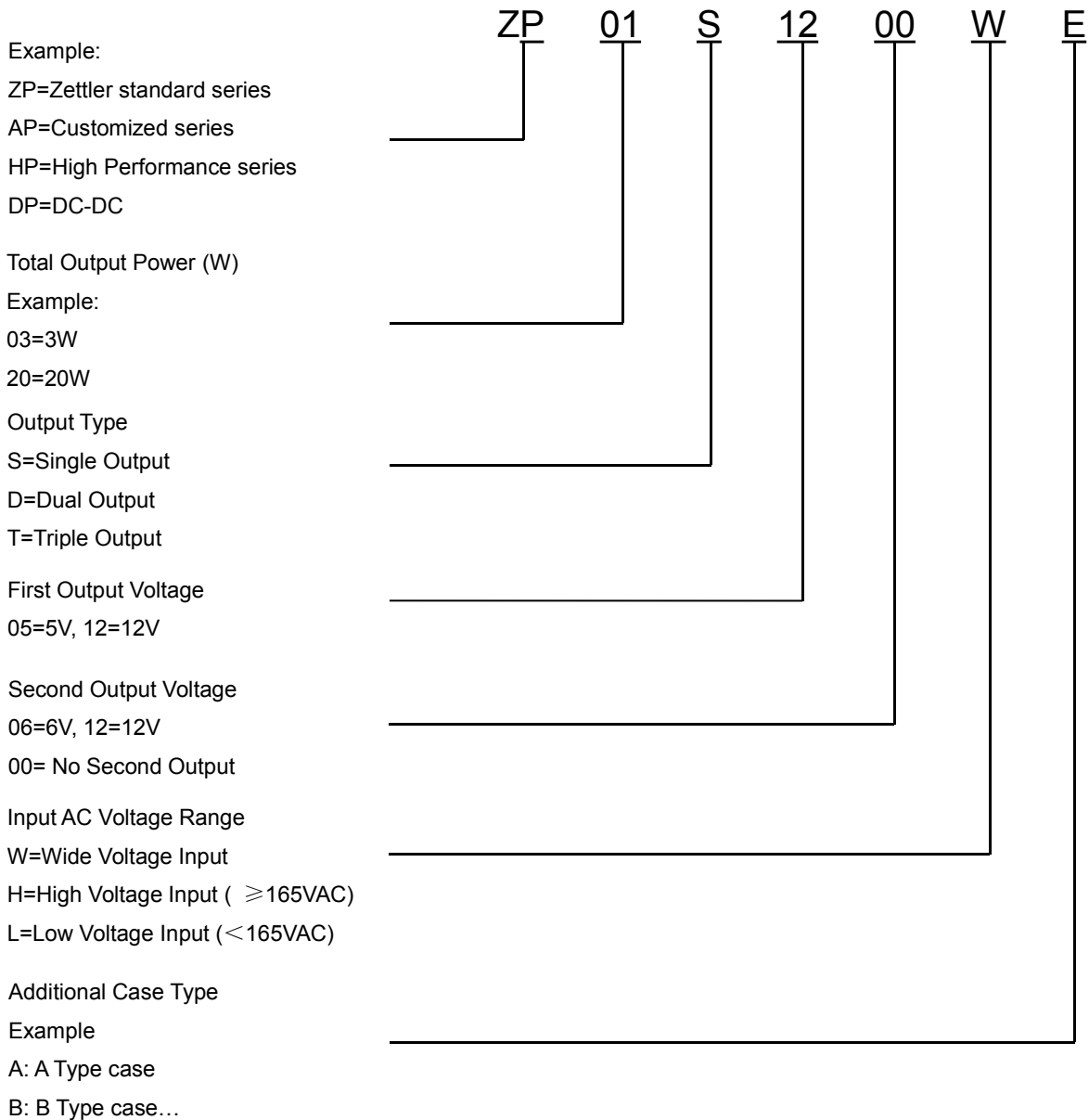




ORDERING CODE (命名规则)



FEATURES (产品特点)

- PCB mounted switching Power module
- AC input voltage range: 90VAC~265VAC
- DC input voltage range: 100VDC~370VDC
- Ambient temperature range:-25°C~70°C
- Storage temperature range:-40°C~105°C
- Leakage current (Input :277VAC):<0.1mA
- Isolation voltage: Input –Output \geq 3000VAC 60S
- Insulation Resistance: Input –Output 500VDC \geq 100M Ohms
- MTBF(at 25°C 70%RH environment):>300000hrs
- Compact size, easy installation
- High efficiency Low standby power consumption, environment-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55032 class B standard
- Insulation: class II

APPLICATIONS (应用)

This series could be widely applied in the LED, light control, Instrument, smart home and other home appliances.

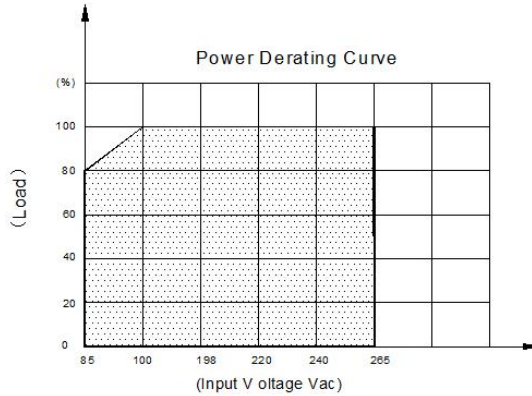
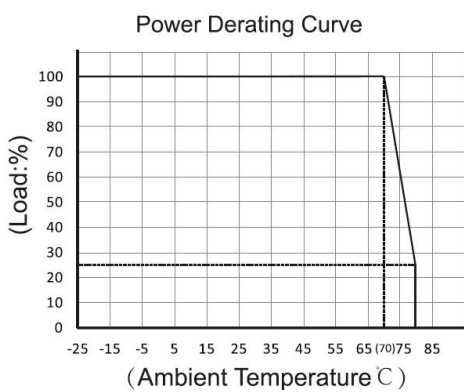
MODEL LIST (型号列表)

| Part No. | Output Power | DC Voltage | Rated Current | Efficiency 230VAC, % Typ. | Ripple &Noise (max) | Ambient TEMP(°C) | Weight |
|-------------|--------------|------------|---------------|------------------------------|------------------------|---------------------|--------|
| ZP01S0300WE | 1W | 3.3Vdc | 300mA | 65% | <7% Vout | 70 | 15g |
| ZP01S0500WE | 1W | 5 Vdc | 200mA | 66% | <5% Vout | 70 | 15g |
| ZP01S0600WE | 1W | 6 Vdc | 167mA | 68% | <5% Vout | 70 | 15g |
| ZP01S0700WE | 1W | 7.5Vdc | 133mA | 68% | <5% Vout | 70 | 15g |
| ZP01S0800WE | 1W | 8Vdc | 125mA | 70% | <5% Vout | 70 | 15g |
| ZP01S0900WE | 1W | 9Vdc | 111mA | 72% | <5% Vout | 70 | 15g |
| ZP01S1000WE | 1W | 10Vdc | 100mA | 72% | <5% Vout | 70 | 15g |
| ZP01S1200WE | 1W | 12Vdc | 85mA | 72% | <5% Vout | 70 | 15g |
| ZP01S1500WE | 1W | 15Vdc | 67mA | 74% | <5% Vout | 70 | 15g |
| ZP01S1800WE | 1W | 18Vdc | 55mA | 74% | <5% Vout | 70 | 15g |
| ZP01S2400WE | 1W | 24Vdc | 42mA | 74% | <5% Vout | 70 | 15g |

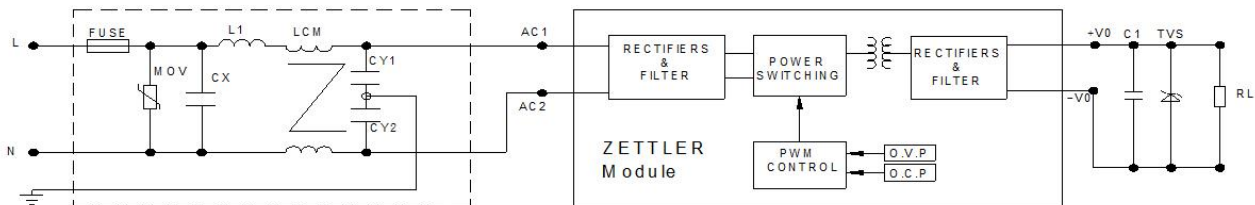
ELECTRICAL SPECIFICATION (电性能参数)

| Model No. / 型号 | | ZP01SXX00WE | | |
|-------------------------------------|---------------------------------|--|--|--|
| Input 输入参数 | Rate Voltage / 额定电压 | 100~240VAC | | |
| | Input Voltage Range / 输入电压范围 | 90-265 VAC (or 100-370VDC) | | |
| | Frequency (Hz) / 输入频率范围 | 47-63 Hz | | |
| | Current (Full load) / 输入电流 | 115VAC | 230VAC | |
| | | 25mA | 18mA | |
| | Inrush Current (<500us) / 冲击电流 | 6A | 10A | |
| | No Load Loss / 待机功耗 | 0.3W Max | | |
| HOT PLUG / 热拔插 | Unavailable | | | |
| Output 输出参数 | Voltage (V) / 输出电压 | Refer to "Model List" | | |
| | Current (mA) max. / 输出额定电流 | Refer to "Model List" | | |
| | Voltage Accuracy / 输出电压精度 | 0-10%: $\pm 7\%$ / 10-100% : $\pm 5\%$ | | |
| | Line Regulation / 线性调节率 | $\pm 2\%$ | | |
| | Load Regulation / 负载调节率 | $\pm 3\%$ | | |
| | Minimum Load (mA) / 最小负载 | 0 | | |
| | Ripple & Noise / 输出纹波 | Refer to "Model List" | | |
| | Efficiency (typ.) / 工作效率 | Refer to "Model List" | | |
| | Set-up Time / 开机时间 | 17.2ms/230Vac, 27.7ms/115Vac | | |
| | Hold up Time / 掉电保持时间(典型值) | 168ms/230Vac, 59ms/115Vac | | |
| Protection 保护特性 | Over Current Protection / 过流保护 | $\geq 120\%I_o$ Self-recovery | | |
| | Short Circuit Protection / 短路保护 | Hiccup ,continuous ,short capable, self-recovery | | |
| Environment 环境 | Operating Temperature / 工作温度 | -25°C...+70°C @Free air convection | | |
| | Operating Humidity / 工作湿度 | 10-90% RH | | |
| | Storage Temperature / 存储温度 | -40°C...+105°C | | |
| | Storage Humidity / 存储湿度 | 5-95% RH | | |
| | Temperature Coefficient/温度漂移系数 | $\pm 0.05\%/^{\circ}\text{C}$ (0~50°C) | | |
| Physical 外观结构 | Case Material / 外壳材质 | Plastic (UL 94V-0 rated) | | |
| | Weight / 产品净重 | 15g (ref.) | | |
| Safety & EMC 安全认证及 电磁兼容 | Dielectric Strength / 绝缘强度 | $\geq 3000\text{V}/50\text{HZ}$ 5mA 1min (OR 4200VDC/2S) (I/P-O/P) | | |
| | Safety Standards / 安全标准 | Compliance With EN60950-1, UL60950-1, UL 62368-1 | | |
| | EMI / 电磁兼容 | Compliance With EN55032, CLASS B | Need to add external EMC component (See the Schematic) | |
| | EMS (Noise Immunity)/ 电磁抗干扰 | EN61000-3-2 Class A Heavy industry level (surge L-N:1KV) | | |
| Reliability Requirement 可靠性要求 | MTBF/平均故障间隔时间 | 300Khrs Min @230VAC . MIL-HDBK-217F (25°C) | | |
| | Burn-In Test/ 老化测试 | The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature | | |

PRODUCT CHARACTERISTIC CURVE (产品特性曲线)



TYPICAL APPLICATION SCHEMATIC (典型应用电路)



| ITEM | MOV | CX | L1 | LCM | CY1,CY2 | FUSE |
|--------|---------|------------|--------------|---------|-------------------|------------|
| 1~2W | 14D561K | 0.1-0.47uF | 0.5~2mH/0.5A | 10-30mH | 100~2200pF/400VAC | 1A/250V |
| 3-10W | 14D561K | 0.1-0.47uF | 0.5~2mH/1A | 10-30mH | 100~2200pF/400VAC | 2A/250V |
| 10~20W | 14D561K | 0.1-0.47uF | 0.5~2mH/1A | 10-30mH | 100~2200pF/400VAC | 3.15A/250V |

Note: External circuit components are only recommendations, customers should choose their own components and values according to their specific system application requirements.

MECHANICAL SPECIFICATION (尺寸图)

