

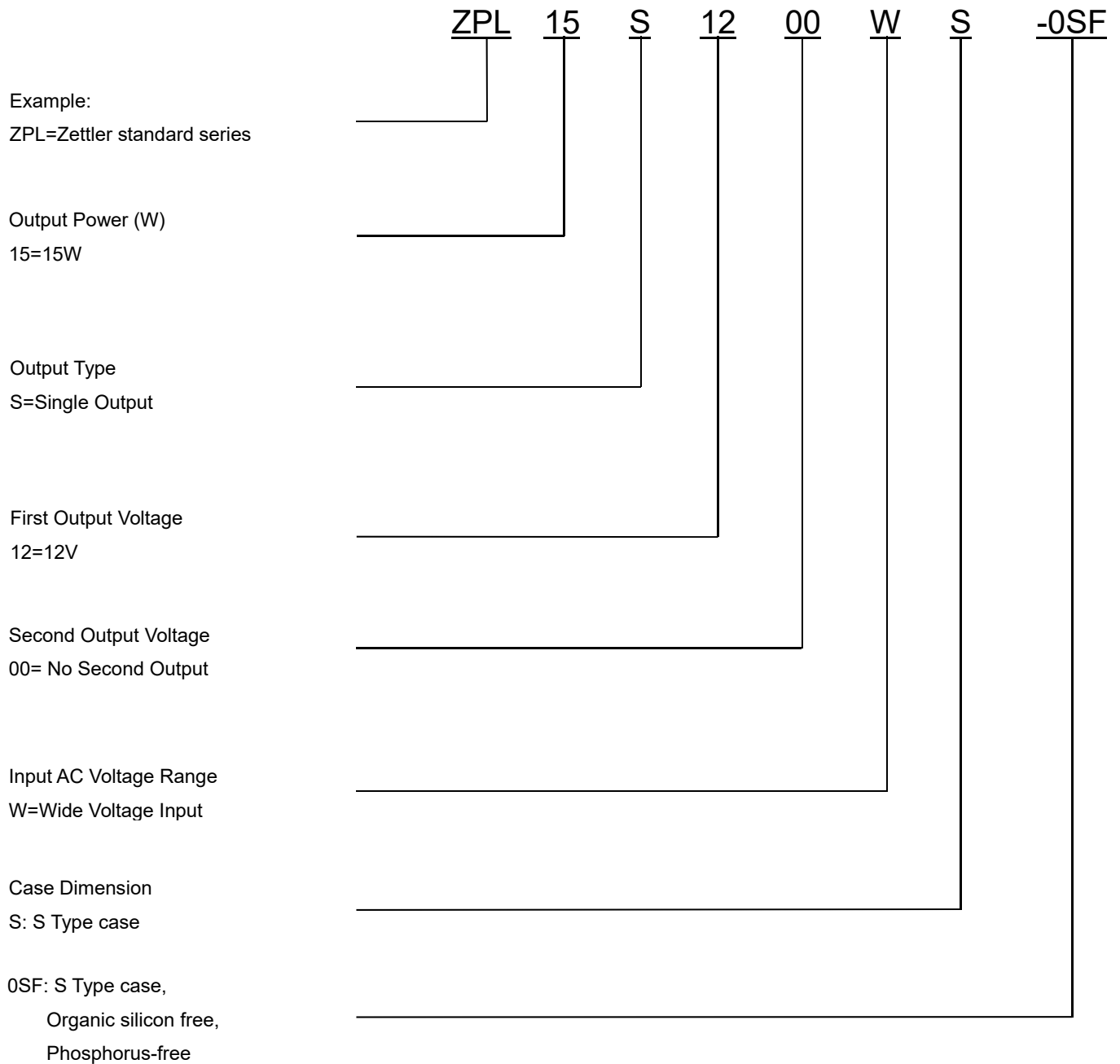


RoHS


Organic silicon free

Phosphorus-free

ORDERING CODE (命名规则)



FEATURES (产品特点)

- PCB mounted switching Power module
- AC input voltage range: 90VAC-305VAC
- DC input voltage range: 120VDC-430VDC
- Ambient temperature range: -40°C ~70°C
- Storage temperature range: -25°C ~85°C
- Leakage current (input :264VAC): <0.3mA
- Isolation voltage: input –Output \geq 3600VAC 60s
- Insulation Resistance: Input –Output 500VDC \geq 100M Ohms
- MTBF: 300Khrs Min MIL-HDBK-217F (25°C)
- Compact size, easy installation, Surge L-N 2.5KV
- High efficiency low standby Power consumption, green environmental protection function
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55032 class B standard
- Class II Construction 

APPLICATIONS (应用)

This series could be widely applied in the applications of harsh industrial, EV charger, Automotive etc.

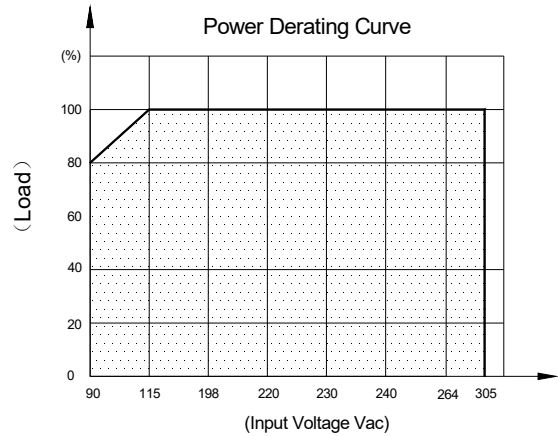
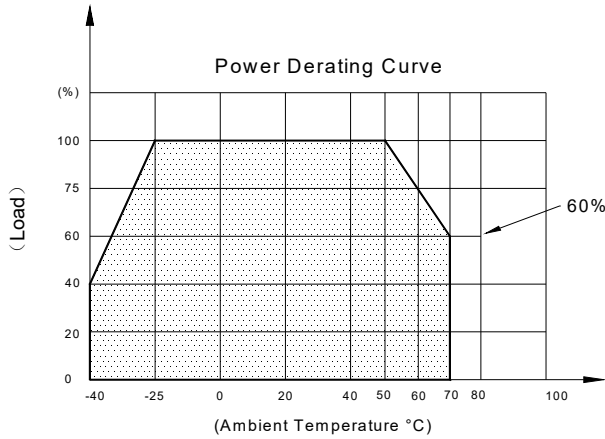
MODEL LIST (型号列表)

| Model No. | Output Power | DC Voltage | Rated Current | Efficiency 230VAC, % Typ. | Ripple & Noise (max) | Ambient TEMP(°C) | Weight | Certificate | | |
|------------------|--------------|------------|---------------|---------------------------|----------------------|------------------|--------|-------------|-----|----|
| | | | | | | | | UL | TUV | CB |
| ZPL15S0500WS-0SF | 15W | 5Vdc | 3000mA | 78% | <200mV | 50 | 78g | ● | ● | ● |
| ZPL15S1200WS-0SF | 15W | 12Vdc | 1250mA | 82% | <200mV | 50 | 78g | ● | ● | ● |
| ZPL15S1500WS-0SF | 15W | 15Vdc | 1000mA | 82% | <200mV | 50 | 78g | ● | ● | ● |
| ZPL15S1800WS-0SF | 15W | 18Vdc | 830mA | 83% | <200mV | 50 | 78g | ● | ● | ● |
| ZPL15S2400WS-0SF | 15W | 24Vdc | 620mA | 83% | <200mV | 50 | 78g | ● | ● | ● |

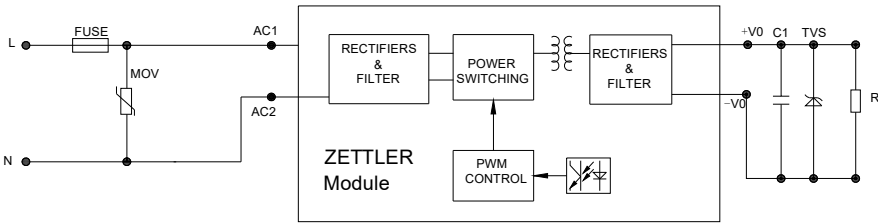
ELECTRICAL SPECIFICATION (电性能参数)

| Model No. / 型号 | | ZPL15SXX00WS-0SF | | |
|-------------------------------------|-----------------------------------|--|--|--------|
| Input 输入参数 | Rated Voltage / 额定电压 | 100-277VAC | | |
| | Voltage Range / 输入电压范围 | 90-305VAC or 120-430VDC | | |
| | Frequency (Hz) / 输入频率范围 | 47-63 Hz | | |
| | Current (Full load) / 输入电流 | 115VAC | 230VAC | 277VAC |
| | | 300mA | 200mA | 180mA |
| | Inrush Current (<500us) / 冲击电流 | 20A | 40A | 50A |
| | No Load Loss / 待机功耗 | 0.3W max. @230VAC | | |
| 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 | ±3% | | |
| | Line Regulation / 线性调节率 | ±0.5% | | |
| | Load Regulation / 负载调节率 | ±1% | | |
| | 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" | | |
| | Start-up Time / 开机延迟时间 | 3S | | |
| Hold up Time / 掉电保持时间(典型值) | 76.9ms/230VAC, 13.6ms/115VAC | | | |
| Protection 保护特性 | Over Current Protection / 过流保护 | Hiccup mode | | |
| | Short Circuit Protection / 短路保护 | Hiccup mode | | |
| Environment 环境 | Operating Temperature / 工作温度 | -40°C...+70°C (40% Load@-40°C) (refer to the Power Derating Curve) | | |
| | Operating Humidity / 工作湿度 | 20~90% RH (No Condensing) at full load | | |
| | Storage Temperature / 存储温度 | -25°C~85°C | | |
| | Storage Humidity / 存储湿度 | 10~95% RH | | |
| | Temperature Coefficient/温度漂移系数 | ±0.05%/°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 | 78g (ref.) | | |
| Safety & EMC 安全认证及 电磁兼容 | Dielectric Strength / 绝缘强度 | I/P-O/P : 3600VAC | | |
| | Protection against electric shock | Class II construction <input type="checkbox"/> | | |
| | Safety Standards / 安全标准 | Compliance with EN62368-1, EN61558-2-16, Plastic materials in accordance with EN60335-1 clause 30 | | |
| | EMI / 电磁兼容 | Compliance with EN55032 CLASS B, EN61000-3-2, EN61000-3-3 | Need to add external EMC component (Refer to the Schematic) | |
| | EMS (Noise Immunity)/ 电磁抗干扰 | Compliance with EN 55035, Surge EN61000-4-5 (2.5KV, L-N) | | |
| Reliability Requirement 可靠性要求 | MTBF/平均故障间隔时间 | 300Khrs Min MIL-HDBK-217F (25°C) | | |
| | Burn-In Test/ 老化测试 | The unit shall be burned in for 2~4 Hours under 277Vac input and with full load at 25°C | | |

PRODUCT CHARACTERISTIC CURVE (产品特性曲线)



TYPICAL APPLICATION SCHEMATIC (典型应用电路)



| ITEM | MOV | FUSE |
|--------|---------|----------------|
| 1~2W | 14D561K | 1A/300V Min |
| 3~10W | 14D561K | 2A/300V Min |
| 10~20W | 14D561K | 3.15A/300V Min |

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)

