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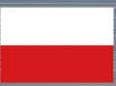
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ZETTLER MAGNETICS

电源模块 | POWER MODULES



ZETTLER MAGNETICS

厦门赛特勒磁电有限公司

公司介绍 COMPANY PROFILE

赛特勒磁电公司作为专业从事电子变压器研发和生产的行业专家，我们始终以市场需求为导向，提供密封变压器、开关电源模块、高频变压器、低频变压器、电流互感器、环形变压器和工字型电感器等一系列产品，并着重于开发环保，高效，轻便，安全，经济的电源产品。我们的客户覆盖了许多全球知名家电、通讯、工业电子设备等领域的品牌。

实力雄厚、经验丰富的研发设计队伍使我们可以在最短的时间内完成对各种类型和规格的产品的设计和开发，并在性能符合各国认证要求的前提下满足不同客户的独特要求。公司绝大部分产品取得VDE、UL、CUL、CQC认证，符合EN61558、EN60950和UL1585、UL506标准。

同时，我们拥有特制的自动化设备、成功的生产运营管理经验、ISO9001质量管理体系认证等完善的质量控制模式和大型综合实验室以及ISO14001环境管理体系认证，能最大程度地保证我们产品生产工艺的稳定性和品质的可靠性。

As an dynamic and market-oriented industrial enterprise, Zettler Magnetics specializes in the development, engineering and production of environmentally friendly, safe, portable, highly efficient and economic power solutions - providing a wide range of transformer products including Encapsulated Power Transformers, Switch-Mode Power Supply Modules, Ferrite Switching Transformers, Laminated Transformers, Current Sensor Transformers, Toroidal Transformers, Drum Core Choke. We serve customers across the globe in many industries and application segments (such as Home Appliance, Communication, Industrial Electronic Products), including many well-known global brands.

Our experienced engineering team will complete even demanding custom product designs on short notice to meet customer specific requirements and comply with all pertinent safety standards. Most of our products carry the required VDE/UL/CUL/CQC approvals and are fully compliant with EN61558, EN60950, UL1585 and UL506.

Our production facilities are equipped with special-design automatic production lines, operated by a management team and staff with deep manufacturing experience, sophisticated quality assurance processes, ISO 9001 compliance, a comprehensive testing lab and in compliance with ISO14001.

典型应用 APPLICATION



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技术信息 TECHNICAL INFORMATION

● 电源调整率 Line Regulation

电源模块在输入电压变化时, 提供稳定输出电压的能力, 用来验证电源模块在最恶劣的电源电压环境下, 输出电源的稳定性是否满足需求。
The power module provides the ability to stabilize the output voltage when the input voltage changes, which is used to verify whether the stability of the output power supply is able to meet in the worst power supply voltage environment.

● 负载调整率 Load Regulation

开关电源在输出负载电流变化时, 提供稳定输出电压的能力, 用来验证电源在最恶劣的负载环境下, 输出电源的稳定性是否满足需求。
Switching power supply provides the ability to stabilize the output voltage when the output load current changes, which is used to verify the power supply in the worst load environment, the stability of the output power supply to meet the demand.

● 输出纹波及噪音 Output Ripple & Noise ,RARD

输出纹波 (PARD) 指在输入电压与输出负载电流均不变的情况下, 其平均直流输出电压上的周期性与随机性偏差量的电压值。输出噪音是表示在经过稳压及滤波后的直流输出电压上所有不需要的噪音部分(包括低频之50/60HZ)电源倍频信号, 高于20KHZ之高频切换信号及其谐波, 再与其随机性信号所组成), 通常以MVP-P峰值电压为单位来表示)

PARD refers to periodicity of average DC voltage and the voltage value of random deviation under the condition of unchanged input voltage and output-load current. Output noise is all unnecessary noise in the DC output voltage which is through voltage stabilization and filtration, including low frequency 50/60HZ power supply frequency-doubled signal, high frequency switching signal (higher than 20KHZ) and its harmonic , and other random signals. Generally it is expressed in MVP-P peak voltage.

● 电源的输入功率 Input Power

True Power = $P_{av}(\text{watt}) = V_1 A_i dt = V_{rms} \times A_{rms} \times \text{Power Factor}$
对一周期内其输入电压与电流乘积之积分值

● 电源的效率 Efficiency

$\Sigma V_{out} \times I_{out} / \text{True Power (watts)}$
输出直流功率之总和与输入功率之比值

● 保护动作 Protections

过电压保护 (OVP, Over Voltage Protection)

当电源供应器的输出电压超过其最大的限定电压时, 会将其输出关闭以避免损坏负载电路元件。
When the output voltage of the power supply exceeds the maximum limit voltage, the output of the power supply Shut down to avoid damaging the load circuit element.

短路保护 (Short-Circuit Protection)

当电源供应器的输出短路时, 则电源供应器应该限制其输出电流或关闭其输出, 以避免损坏。
When the output current of power supply exceeds rated current, the power supply should limit its output current or shut down its output to avoid damage by overloaded current.

过流保护 (OCP, Over Current Protection)

当电源供应器的输出电流超过额定时, 则电源供应器应该限制其输出电流或关闭其输出, 以避免负载电流过大而损坏。
When the output of the power supply is short, the power supply should limit its output current or shut down its output to avoid damage.

过功率保护 (OPP, Over Power Protection)

当电源的输出功率(可为单一输出或多组输出)超过额定时, 则电源应该限制其输出功率或关闭其输出, 以避免负载功率过大而损坏或发生危险。
When the output power (single output or multi outputs) exceeds rated power, power supply should limit output power or shut down output to avoid damages by overload power.



命名规则 ORDERING CODE

Z P 05 S 12 00 W A -NC

Series name
ZP=Zettler standard series
AP=Customized series
HP=High Performance series
DP=DC - DC

Total Output Power (W)
Example:
03=3W
.....
20=20W

Output Type
S=Single Output
D=Dual Output
T=Triple Output

First Output Voltage
05=5V, 12=12V

Second Output Voltage
06=6V, 12=12V
00= No Second Output

Input AC Voltage Range
W=Wide Voltage Input
H=High Voltage Input ($\geq 165\text{VAC}$)
L=Low Voltage Input ($< 165\text{VAC}$)

Additional Case Type
Example
A: A Type case
B: B Type case...

Supplementary code
NC: P-S Isolated S-S Isolated

HP01 SERIES:[1W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 305VAC
- DC input voltage range: 100VDC ~ 430VDC
- Ambient temperature range: -25°C ~ 85°C
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:305VAC): <0.25mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >1000000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption<0.1W, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 305VAC
- 直流输入电压范围: 100VDC ~ 430VDC
- 工作环境温度范围: -25°C ~ 85°C
- 储存温度范围: -40°C ~ 105°C
- 漏电流(输入电压:305VAC): <0.25mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(25°C 70%RH): >1000000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗<0.1W, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

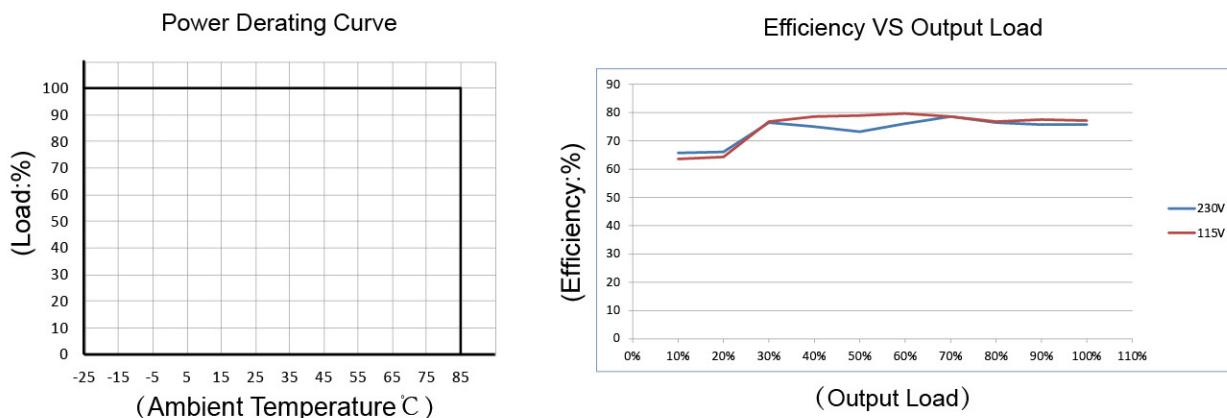
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise (max)	Ambient TEMP(°C)	Weight
HP01S0300WI	1W	3.3Vdc	300mA	66%	150mVp-p	85	20g
HP01S0500WI	1W	5Vdc	200mA	70%	150mVp-p	85	20g
HP01S0900WI	1W	9Vdc	111mA	72%	150mVp-p	85	20g
HP01S1200WI	1W	12Vdc	83mA	74%	150mVp-p	85	20g
HP01S1500WI	1W	15Vdc	67mA	75%	200mVp-p	85	20g
HP01S2400WI	1W	24Vdc	42mA	77%	200mVp-p	85	20g

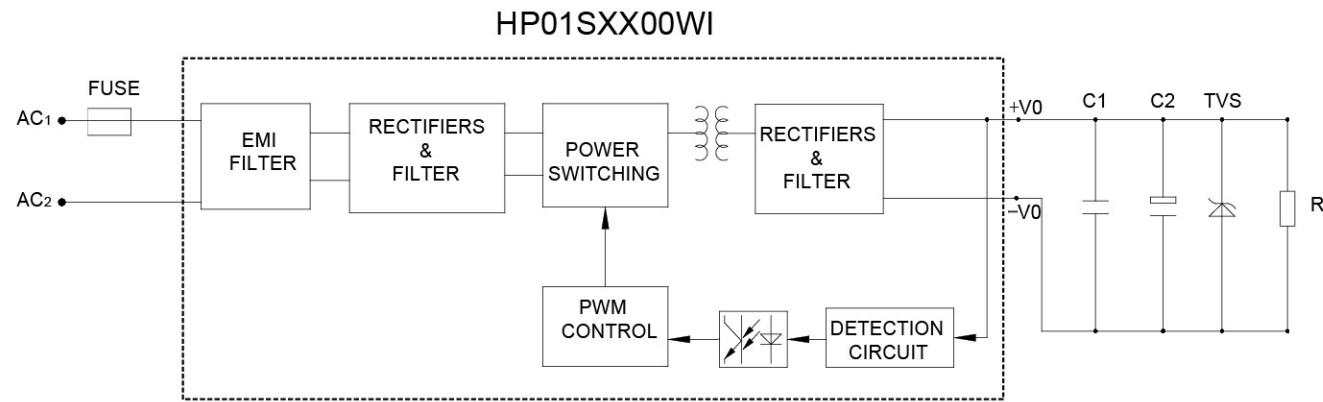
电性能 ELECTRONIC SPECIFICATION

项目 Item	规格 Specification		
输入 Input	输入电压范围 Input Voltage Range	85~305Vac or 100~430Vdc	
	输入频率范围 AC Input Frequency Range	47~63Hz	
	输入电流 Input Current	115Vac	230Vac
		25mA	18mA
	冲击电流 Inrush Current	115Vac	230Vac
		6A	10A
	待机功耗 Stand-by Power Consumption	0.1W Max	
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)	
	热插拔 Hot Plug	不支持(Unavailable)	
输出 Output	输出电压精度 Output Voltage Accuracy	±2.5%	
	线性调节率 Line Regulation	±0.5%	
	负载调节率 Load Regulation	±0.5%	
	温度漂移系数 Temperature Drift Factor	±0.03%/°C (0~85°C)	
	最小负载 Min. Load	0	
	满载开机上升时间 Set-Up Time At Full Load	≤50ms/230Vac , ≤30ms /115Vac	
	满载掉电保持时间(典型值) Hold-up Time At Full Load	> 40ms/230Vac , > 12ms/115Vac	
	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery	
环境 Ambient	短路保护 Short Circuit Protection	打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery	
	工作环境温度 Ambient Temperature	-25°C ~ 85°C (Refer to derating curve)	
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load	
	存储温度 Storage Temperature	-40°C ~ 105°C	
安全&EMC Safety&EMC requirement	存储湿度 Storage Humidity	5%~95%	
	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S	
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
	内置 EMI Built-in EMI filter	传导骚扰 CE	Meet CISPR22/EN55022 , CLASS B
		辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	1000Khrs Min @230VAC input 25°C	
	老化测试 Burn-In Test	输入 264Vac , 常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature	

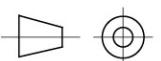
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



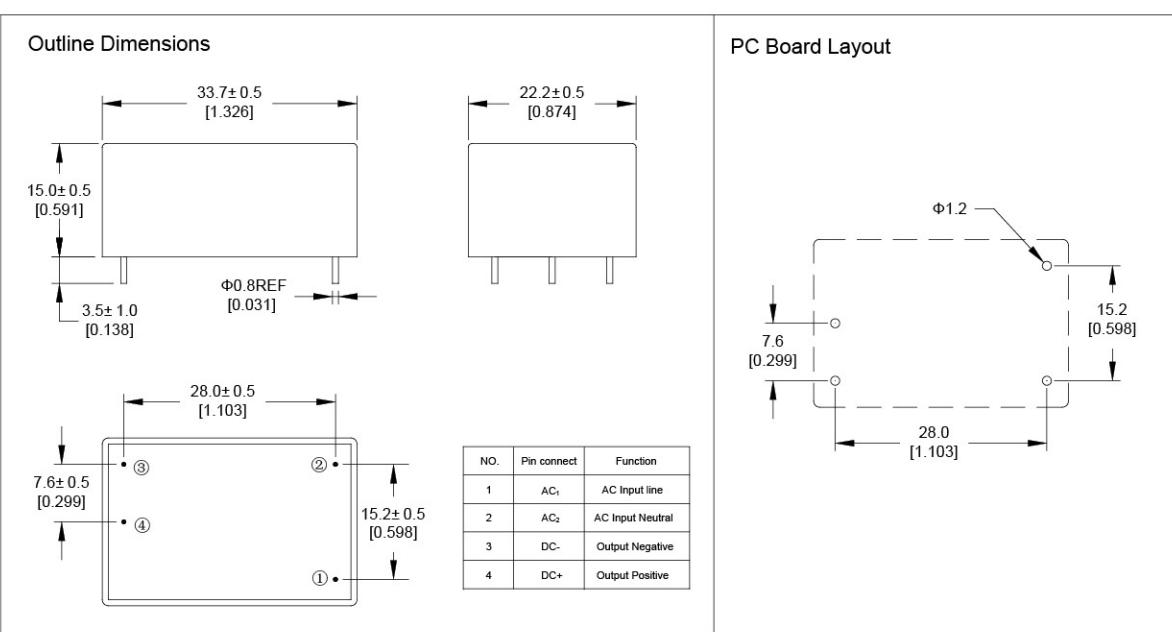
典型应用电路 TYPICAL APPLICATION SCHEMATIC



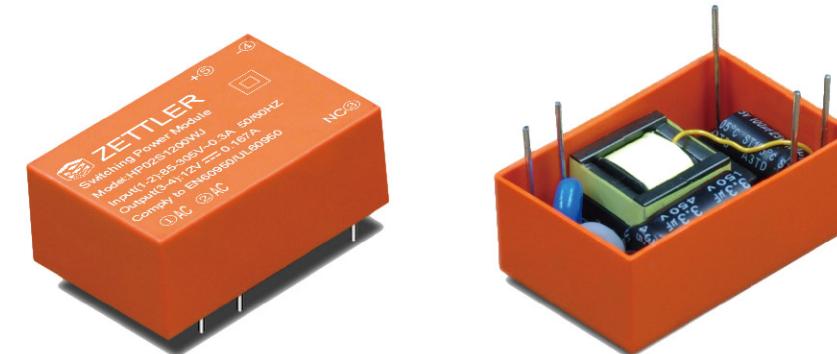
尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



HP02 SERIES: [2W]



Pending till 2017



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 305VAC
- DC input voltage range: 100VDC ~ 430VDC
- Ambient temperature range: - 25°C ~ 85°C
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:305VAC): <0.25mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >1000000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption<0.1W, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 305VAC
- 直流输入电压范围: 100VDC ~ 430VDC
- 工作环境温度范围: - 25°C ~ 85°C
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:305VAC): <0.25mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(25°C 70%RH): >1000000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗<0.1W, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

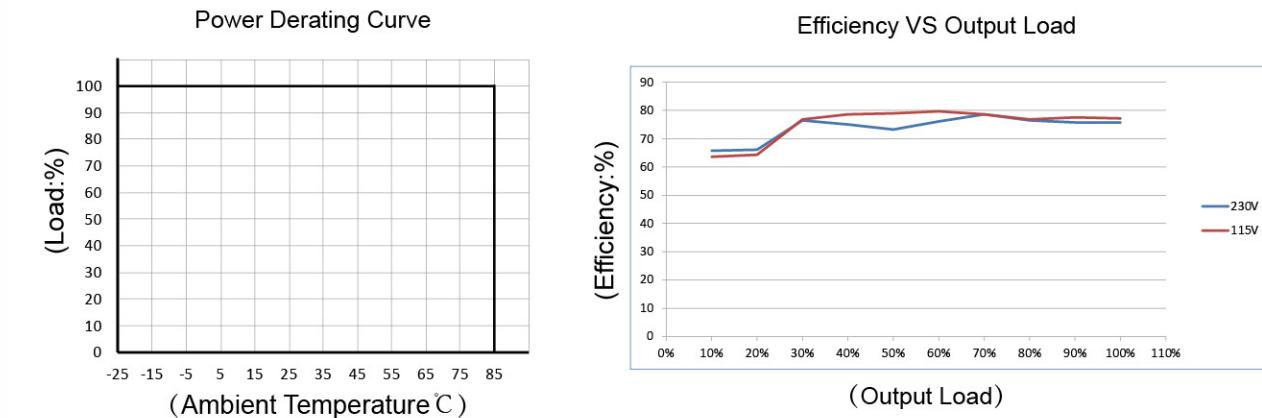
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise (max)	Ambient TEMP(°C)	Weight
HP02S0300WJ	2W	3.3Vdc	600mA	66%	150mVp-p	85	30g
HP02S0500WJ	2W	5Vdc	400mA	70%	150mVp-p	85	30g
HP02S0900WJ	2W	9Vdc	222mA	72%	150mVp-p	85	30g
HP02S1200WJ	2W	12Vdc	167mA	74%	150mVp-p	85	30g
HP02S1500WJ	2W	15Vdc	133mA	75%	200mVp-p	85	30g
HP02S2400WJ	2W	24Vdc	83mA	77%	200mVp-p	85	30g

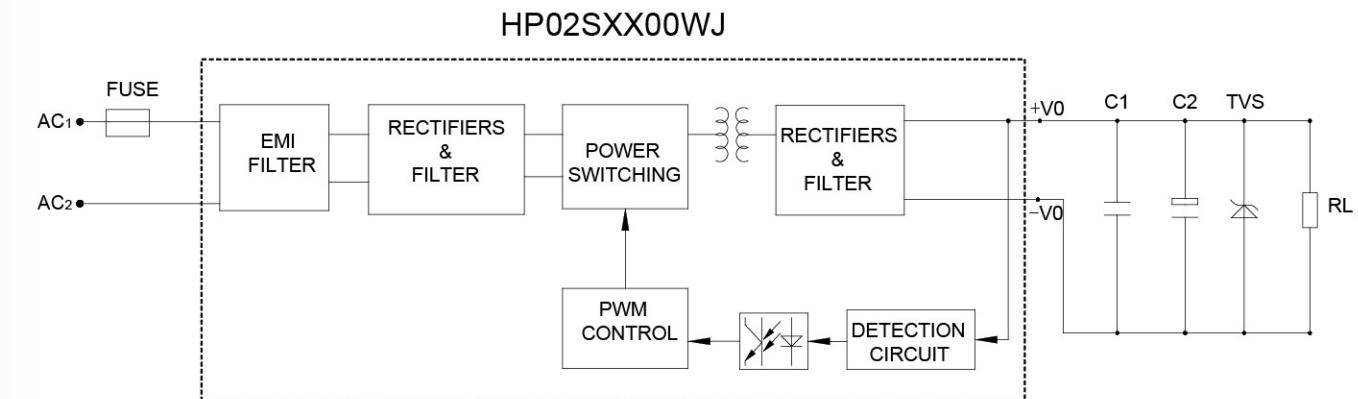
电性能 **ELECTRONIC SPECIFICATION**

项目 Item	规格 Specification			
输入 Input	输入电压范围 Input Voltage Range	85~305Vac or 100~430Vdc		
	输入频率范围 AC Input Frequency Range	47~63Hz		
	输入电流 Input Current	115Vac	230Vac	
		45mA	30mA	
	冲击电流 Inrush Current	115Vac	230Vac	
		6A	10A	
	待机功耗 Stand-by Power Consumption	0.1W Max		
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)		
输出 Output	热插拔 Hot Plug	不支持(Unavailable)		
	输出电压精度 Output Voltage Accuracy	±2.5%		
	线性调节率 Line Regulation	±0.5%		
	负载调节率 Load Regulation	±0.5%		
	温度漂移系数 Temperature Drift Factor	±0.03%/°C (0~85°C)		
	最小负载 Min. Load	0		
	满载开机上升时间 Set-Up Time At Full Load	≤100ms/230Vac , ≤150ms /115Vac		
	满载掉电保持时间(典型值) Hold-up Time At Full Load	>40ms/230Vac , > 12ms/115Vac		
保护特性 Protection Characteristics	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery		
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery		
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)		
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load		
	存储温度 Storage Temperature	- 40°C ~ 105°C		
	存储湿度 Storage Humidity	5%~95%		
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S		
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16		
	内置EMI Built-in EMI filter	传导骚扰 CE Meet CISPR22/EN55022 , CLASS B	辐射骚扰 RE Meet CISPR22/EN55022, CLASS B	
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	1000Khrs Min @230VAC input 25°C		
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature		

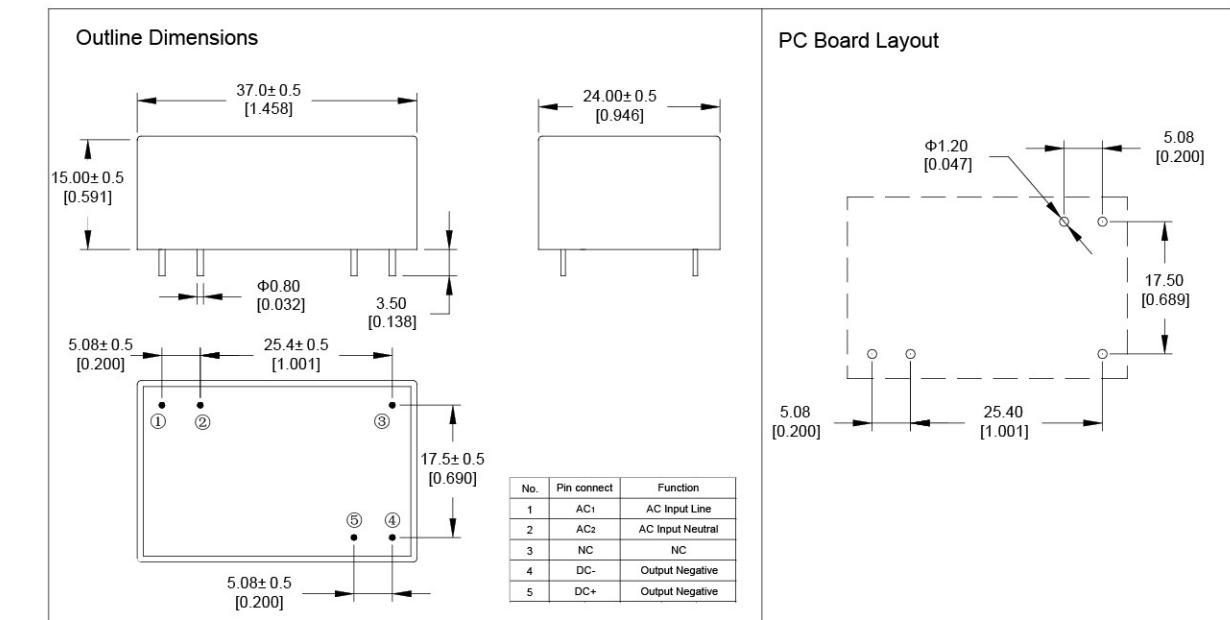
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



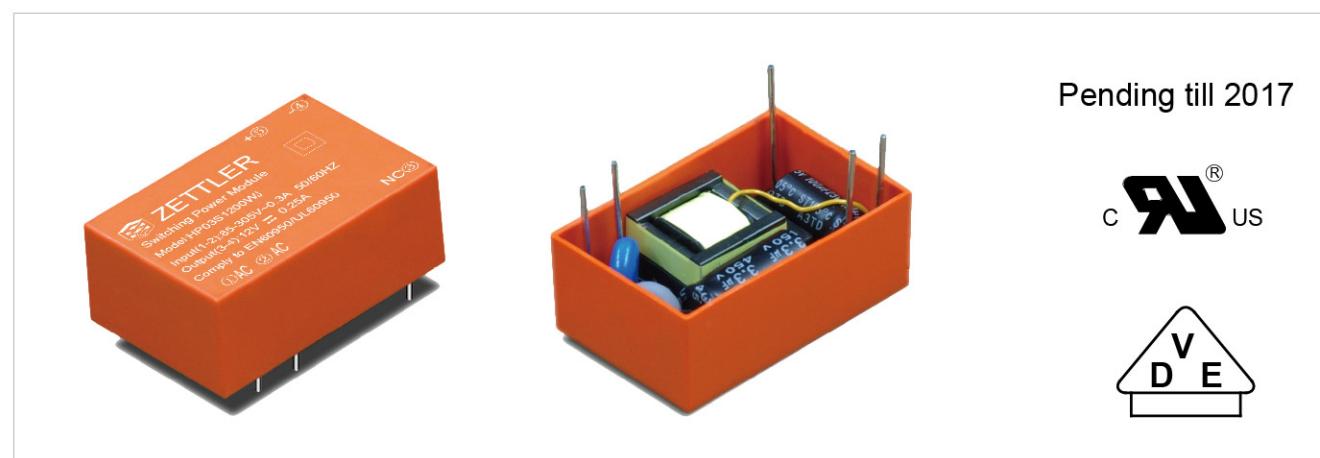
典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



尺寸图 **MECHANICAL SPECIFICATION**



HP03 SERIES:[3W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 305VAC
- DC input voltage range: 100VDC ~ 430VDC
- Ambient temperature range: -25°C ~ 85°C
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:305VAC): <0.25mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >1000000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption<0.1W, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 305VAC
- 直流输入电压范围: 100VDC ~ 430VDC
- 工作环境温度范围: -25°C ~ 85°C
- 储存温度范围: -40°C ~ 105°C
- 漏电流(输入电压:305VAC): <0.25mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温): >1000000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗<0.1W, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

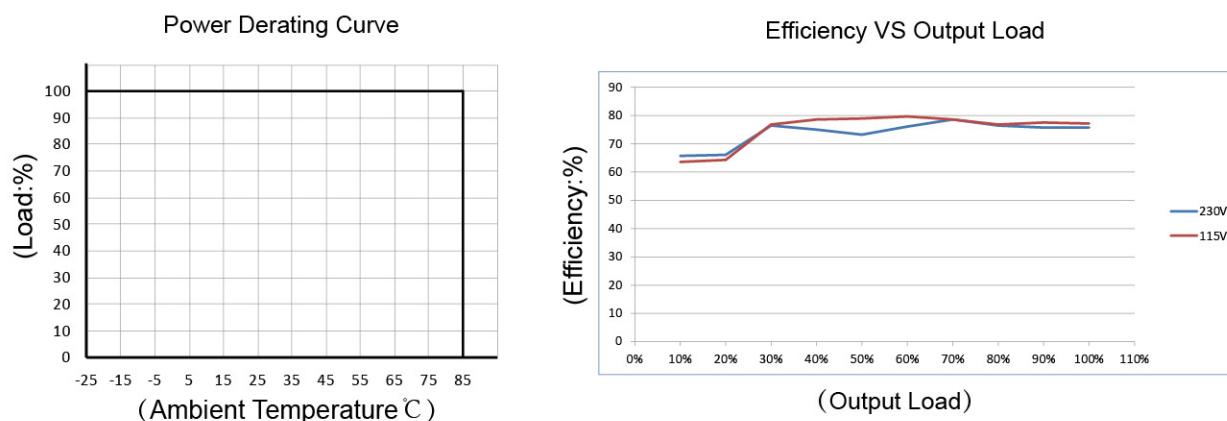
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise (max)	Ambient TEMP(°C)	Weight
HP03S0300WJ	3W	3.3Vdc	900mA	66%	100mVp-p	85	30g
HP03S0500WJ	3W	5Vdc	600mA	72%	100mVp-p	85	30g
HP03S0900WJ	3W	9Vdc	333mA	74%	100mVp-p	85	30g
HP03S1200WJ	3W	12Vdc	250mA	76%	150mVp-p	85	30g
HP03S1500WJ	3W	15Vdc	200mA	77%	200mVp-p	85	30g
HP03S2400WJ	3W	24Vdc	125mA	78%	240mVp-p	85	30g

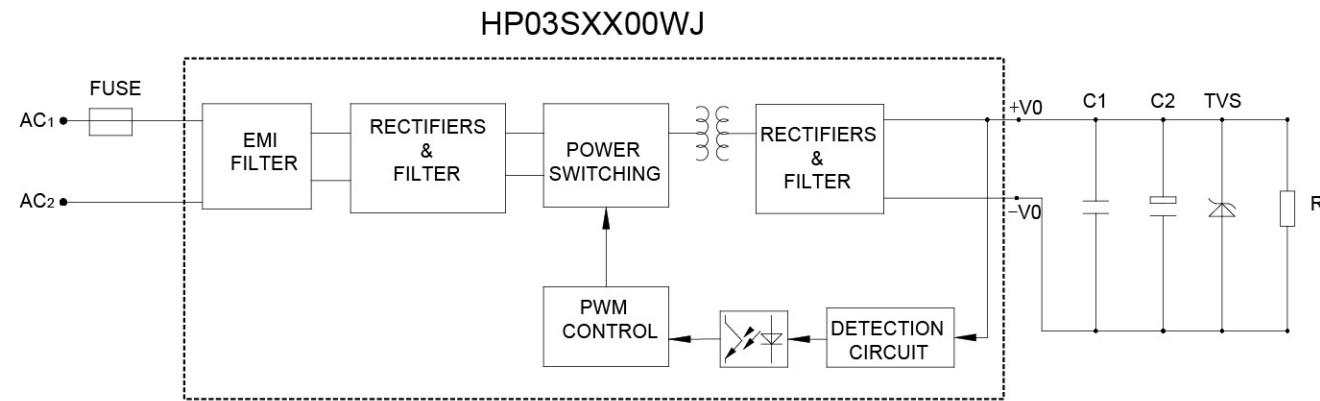
电性能 ELECTRONIC SPECIFICATION

项目 Item		规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~305Vac or 100~430Vdc	
	输入频率范围 AC Input Frequency Range	47~63Hz	
	输入电流 Input Current	115Vac	230Vac 277Vac
		70mA	40mA 35mA
	冲击电流 Inrush Current	115Vac	230Vac
		10A	20A
	待机功耗 Stand-by Power Consumption	0.1W Max	
输出 Output	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)	
	热插拔 Hot Plug	不支持(Unavailable)	
	输出电压精度 Output Voltage Accuracy	±2.5%	
	线性调节率 Line Regulation	±0.5%	
	负载调节率 Load Regulation	±0.5%	
	温度漂移系数 Temperature Drift Factor	±0.03%/°C (0-85°C)	
	最小负载 Min. Load	0	
保护特性 Protection Characteristics	满载开机上升时间 Set-Up Time At Full Load	≤50ms/230Vac , ≤30ms /115Vac	
	满载掉电保持时间(典型值) Hold-up Time At Full Load	> 40ms/230Vac , > 12ms/115Vac	
环境 Ambient	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery	
	短路保护 Short Circuit Protection	打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery	
	工作环境温度 Ambient Temperature	-25°C ~ 85°C (Refer to derating curve)	
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load	
安全&EMC Safety&EMC requirement	存储温度 Storage Temperature	-40°C ~ 105°C	
	存储湿度 Storage Humidity	5%~95%	
	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S	
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
可靠性 Reliability Requirement	内置 EMI Built-in EMI filter	传导骚扰 CE	Meet CISPR22/EN55022 , CLASS B
		辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
	MTBF(MIL-HDBK-217F)	1000Khrs Min @230VAC input 25°C	
老化测试 Burn-In Test	输入 264Vac , 常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature		

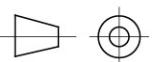
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



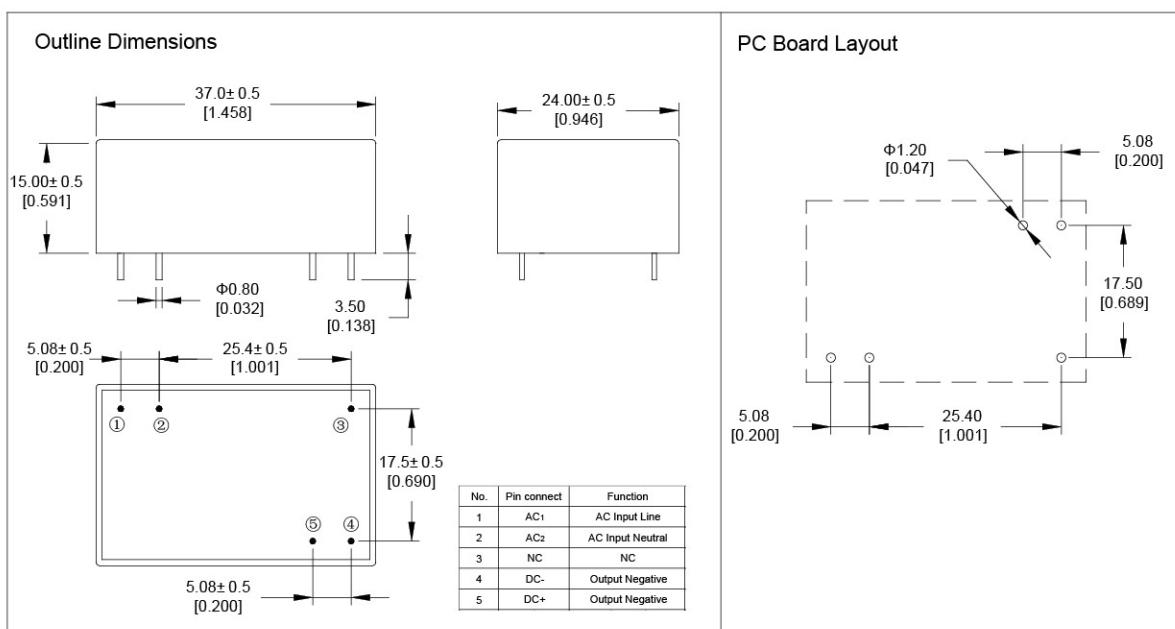
典型应用电路 TYPICAL APPLICATION SCHEMATIC



尺寸图 MECHANICAL SPECIFICATION



Scale:not 1:1



BP01 SERIES: [1W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 90VAC ~ 308VAC
- DC input voltage range: 100VDC ~ 390VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 90VAC ~ 308VAC
- 直流输入电压范围: 100VDC ~ 390VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温): >300000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

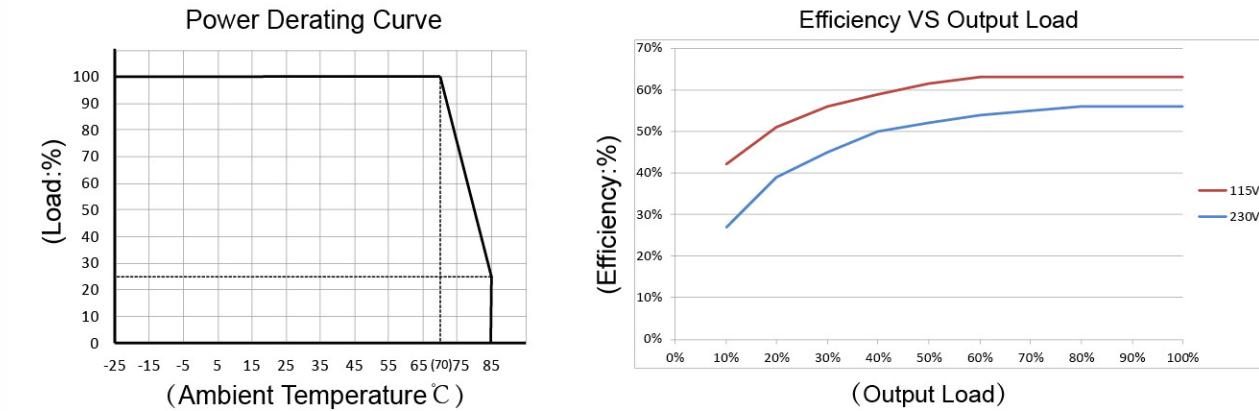
型号列表 MODEL LIST

Order Number	Output S1		Output S2		Efficiency 230VAC, % Typ.	Ripple & Noise	Ambient TEMP(°C)	Weight	Certificate
	DC Voltage	Rated Current	DC Voltage	Rated Current					
BP01D1403W	14Vdc	48mA	3.3Vdc	23mA	60%	<1% Vout	70	18g	●
BP01D1405W	14Vdc	43mA	5Vdc	28mA	60%	<1% Vout	70	18g	●
BP01D0803W	8Vdc	72mA	3.3Vdc	53mA	60%	<1% Vout	70	18g	●
BP01D0805W	8Vdc	42mA	5Vdc	83mA	60%	<1% Vout	70	18g	●
BP01S1400W	14Vdc	71mA			65%	<1% Vout	70	18g	●
BP01S0800W	8Vdc	83mA			65%	<1% Vout	70	18g	●

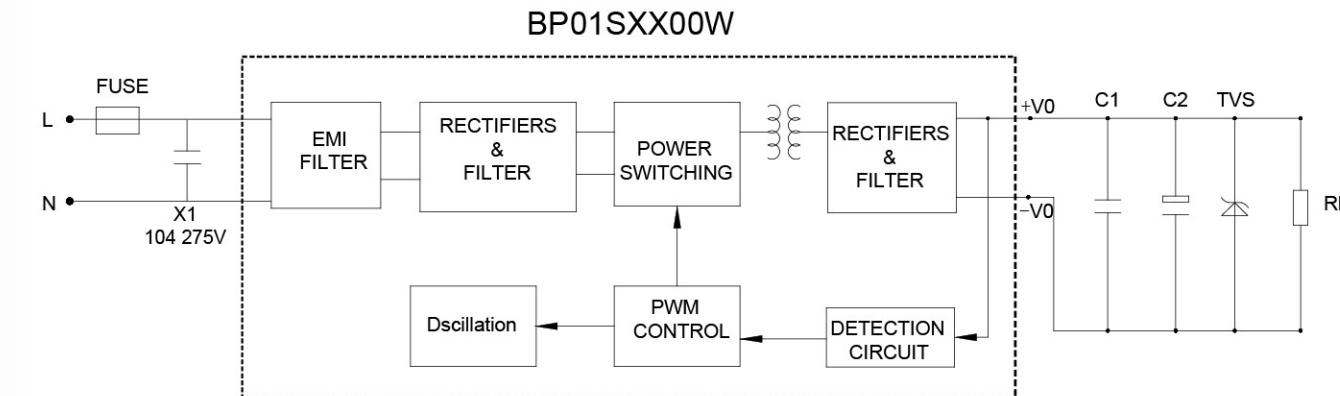
电性能 **ELECTRONIC SPECIFICATION**

项目 Item		规格 Specification
输入 Input		输入电压范围 Input Voltage Range 90~308Vac or 100~390Vdc
		输入频率范围 AC Input Frequency Range 47~63Hz
		输入电流 Input Current 115Vac 230Vac 40mA 26mA
		冲击电流 Inrush Current 115Vac 230Vac 6A 10A
		待机功耗 Stand-by Power Consumption 0.3W Max
		外接保险管推荐值 Recommended External Input Fuse 1A/250V 慢断(Time lag)
		热插拔 Hot Plug 不支持(Unavailable)
输出 Output		输出电压精度 Output Voltage Accuracy $\pm 5\%$
		线性调节率 Line Regulation $\pm 1\%$
		负载调节率 Load Regulation $\pm 1\%$
		温度漂移系数 Temperature Drift Factor $\pm 0.05\%/\text{°C}$ (0~85°C)
		最小负载 Min. Load 0
		满载开机上升时间 Set-Up Time At Full Load $\leq 68\text{ms}/230\text{Vac}$, $\leq 60\text{ms}/115\text{Vac}$
		满载掉电保持时间(典型值) Hold-up Time At Full Load $> 20\text{ms}/230\text{Vac}$, $> 10\text{ms}/115\text{Vac}$
保护特性 Protection Characteristics		过流保护 Over-Current Protection $\geq 120\%I_{\text{o}}$ 自恢复 Self-recovery
		短路保护 Short Circuit Protection 打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery
环境 Ambient		工作环境温度 Ambient Temperature - 25°C ~ 85°C (Refer to derating curve)
		工作环境湿度 Ambient Humidity 10~90% RH (无冷凝 No Condensing) at full load
		存储温度 Storage Temperature - 40°C ~ 105°C
		存储湿度 Storage Humidity 5%~95%
安全&EMC Safety&EMC requirement		绝缘强度 Dielectric Strength Input-Output $\geq 3000\text{VAC}$ 5mA 60S
		设计参考标准 Reference Safety Standards UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
		EMI filter 需外接电容 Meet CISPR22/EN55022, CLASS B 辐辐射 RE Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement		MTBF(MIL-HDBK-217F) 300Khrs Min @230VAC input 25°C
		老化测试 Burn-In Test 输入 264Vac, 常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

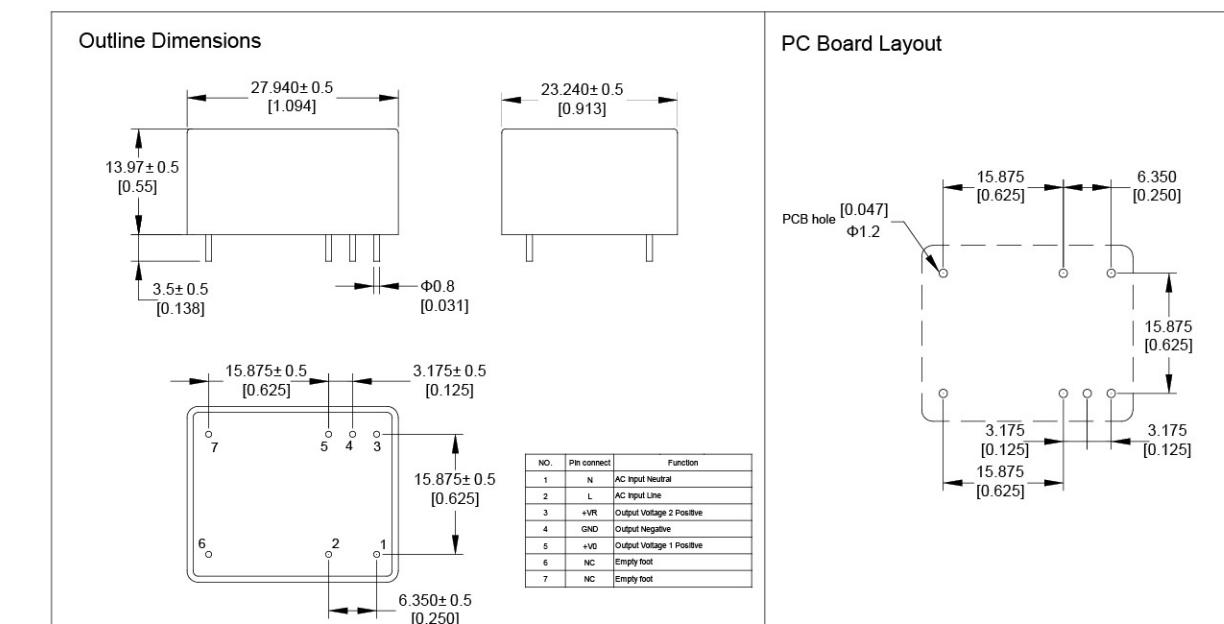
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



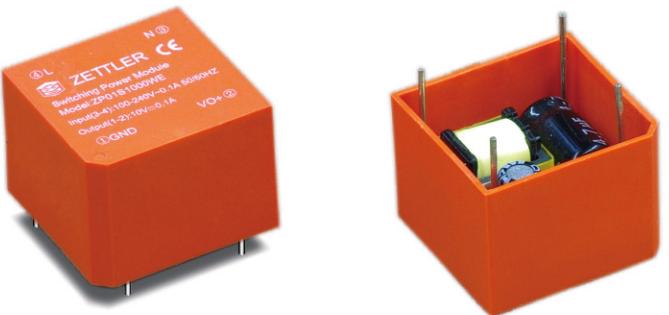
典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



尺寸图 **MECHANICAL SPECIFICATION**



ZP01 STANDARD SERIES:[1W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 90VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

APPLICATIONS

该系列产品在LED、灯光控制，仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

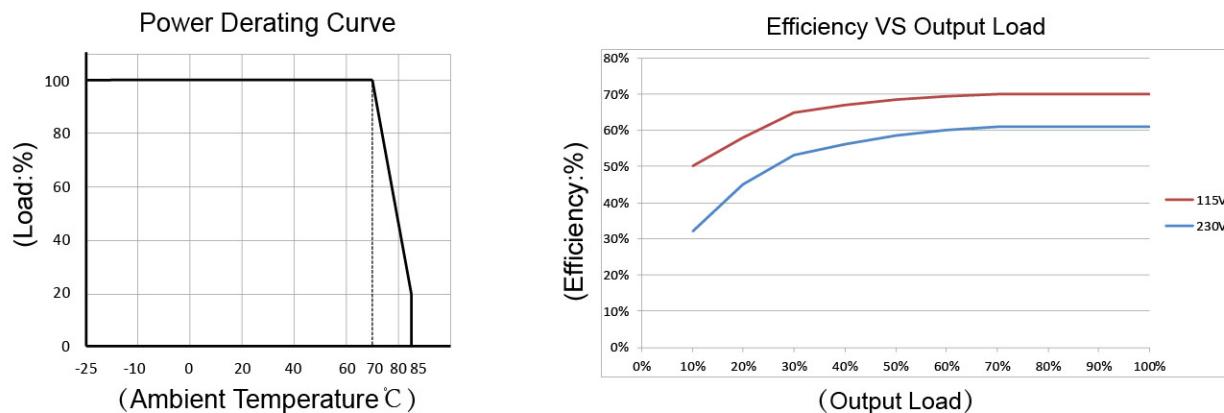
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP01S0300WE	1W	3.3Vdc	300mA	65%	<5% Vout	70	15g
ZP01S0500WE	1W	5Vdc	200mA	66%	<5% Vout	70	15g
ZP01S0600WE	1W	6Vdc	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

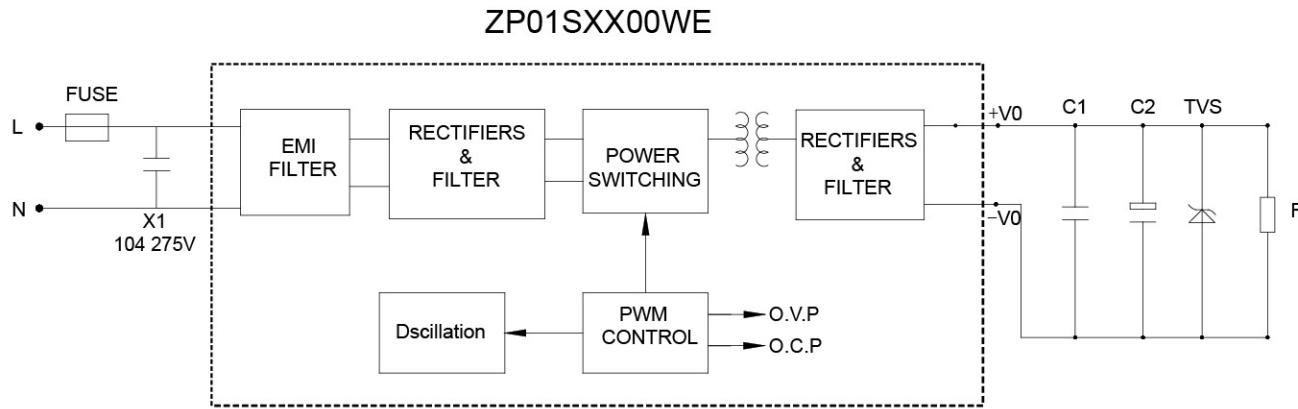
电性能 ELECTRONIC SPECIFICATION

项目 Item	规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	90~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac 230Vac 25mA 18mA
	冲击电流 Inrush Current	115Vac 230Vac 6A 10A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
输出 Output	输出电压精度 Output Voltage Accuracy	±5%
	线性调节率 Line Regulation	±1%
	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	17.2ms/230Vac 27.7ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	168ms/230Vac 59ms/115Vac
保护特性 Protection Characteristics	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	- 40°C ~ 105°C
	存储湿度 Storage Humidity	5%~95%
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	Meet CISPR22/EN55022 , CLASS B
	辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-in Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

产品特性曲线 PRODUCT CHARACTERISTIC CURVE



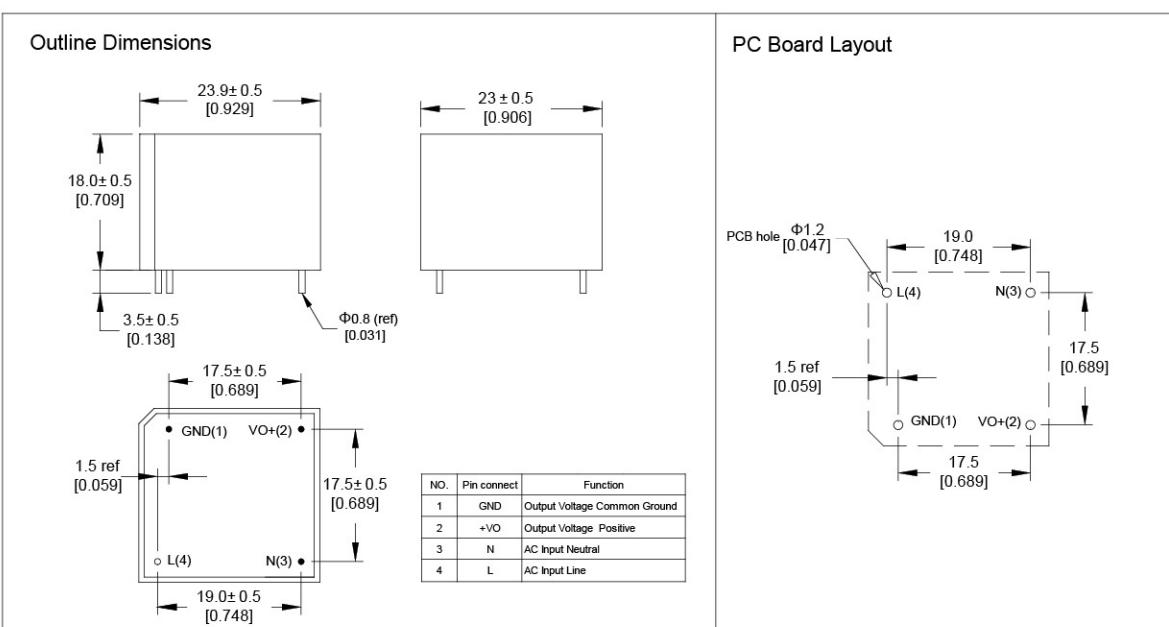
典型应用电路 TYPICAL APPLICATION SCHEMATIC



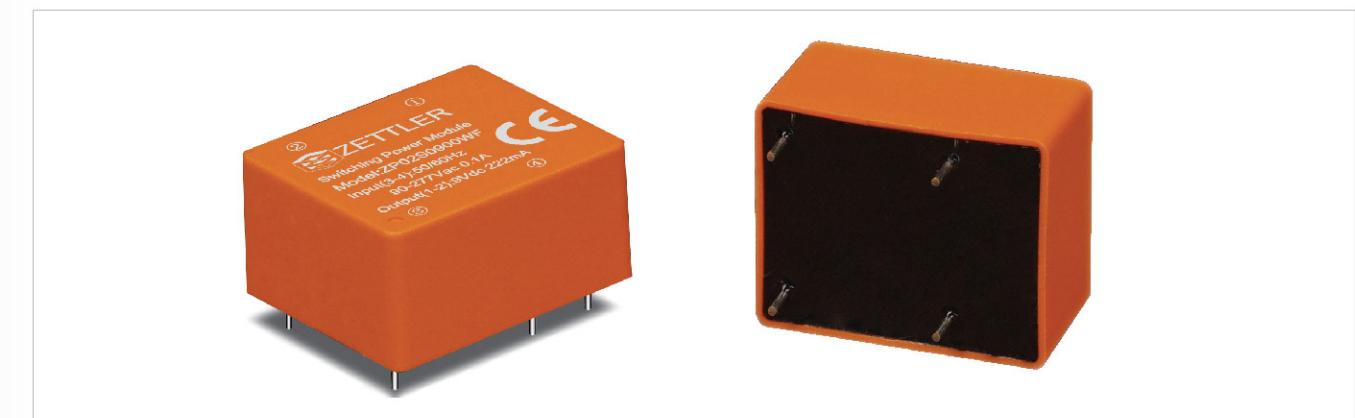
尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



ZP02 STANDARD SERIES:[2W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >30000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温): >30000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

APPLICATIONS

该系列产品在LED、灯光控制，仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

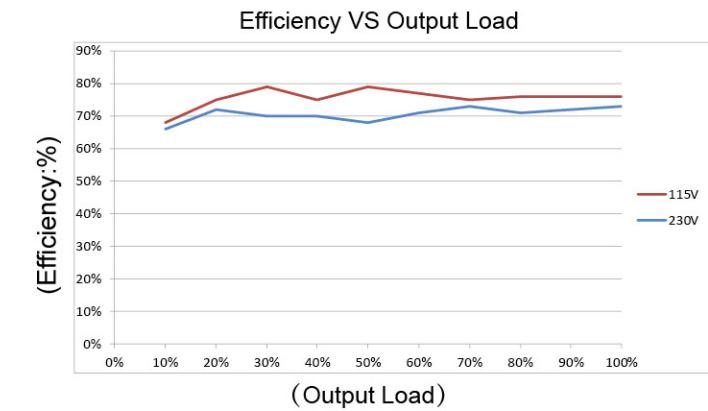
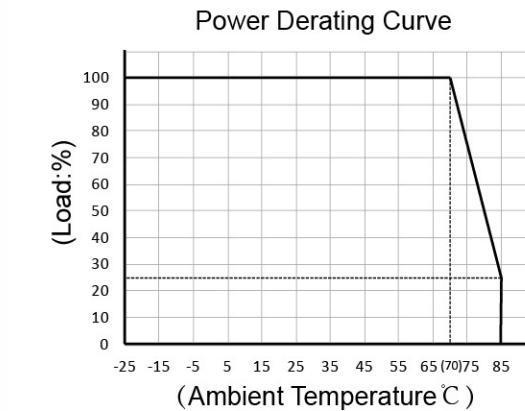
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise	Ambient TEMP(°C)	Weight
ZP02S0300WF	2W	3.3Vdc	606mA	65%	<3% Vout	70	18g
ZP02S0500WF	2W	5Vdc	400mA	65%	<3% Vout	70	18g
ZP02S0600WF	2W	6Vdc	333mA	65%	<3% Vout	70	18g
ZP02S0700WF	2W	7.5Vdc	266mA	68%	<3% Vout	70	18g
ZP02S0900WF	2W	9Vdc	222mA	68%	<3% Vout	70	18g
ZP02S1200WF	2W	12Vdc	166mA	68%	<3% Vout	70	18g
ZP02S1500WF	2W	15Vdc	133mA	70%	<3% Vout	70	18g
ZP02S1800WF	2W	18Vdc	111mA	70%	<3% Vout	70	18g
ZP02S2400WF	2W	24Vdc	83mA	70%	<3% Vout	70	18g

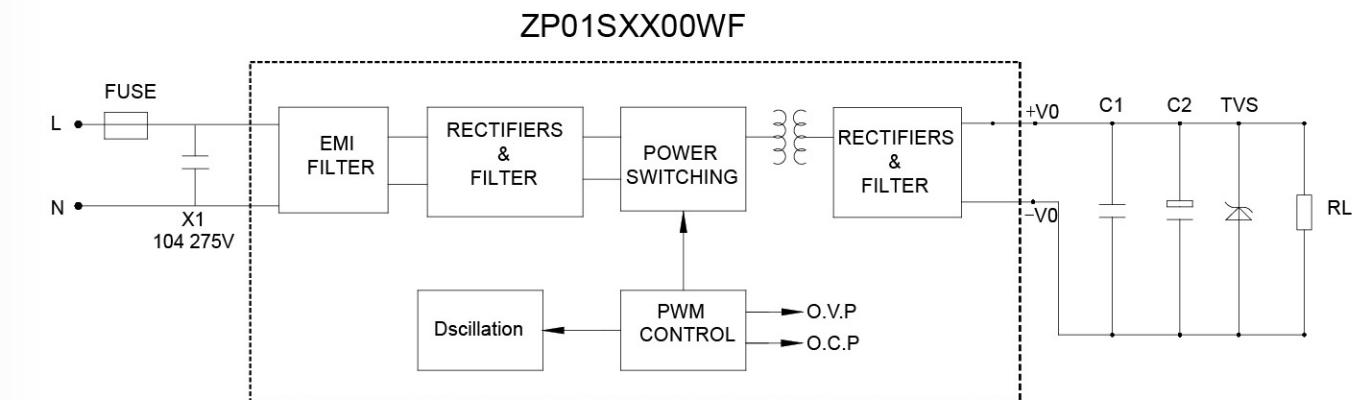
电性能 ELECTRONIC SPECIFICATION

项目 Item		规格 Specification	
输入 Input		输入电压范围 Input Voltage Range	
		85~265Vac or 100~370Vdc	
		输入频率范围 AC Input Frequency Range	
		47~63Hz	
		输入电流 Input Current	
		115Vac	230Vac
		25mA	18mA
		冲击电流 Inrush Current	115Vac 230Vac
		6A	10A
待机功耗 Stand-by Power Consumption		0.3W Max	
外接保险管推荐值 Recommended External Input Fuse		1A/250V 慢断(Time lag)	
热插拔 Hot Plug		不支持(Unavailable)	
输出 Output		输出电压精度 Output Voltage Accuracy	
		±5%	
		线性调节率 Line Regulation	
		±1%	
		负载调节率 Load Regulation	
		±1%	
		温度漂移系数 Temperature Drift Factor	
		±0.05%/°C (0~85°C)	
保护特性 Protection Characteristics		最小负载 Min. Load	
		0	
满载开机上升时间 Set-Up Time At Full Load		17.2ms/230Vac	27.7ms/115Vac
满载掉电保持时间(典型值) Hold-up Time At Full Load		168ms/230Vac	59ms/115Vac
环境 Ambient		过流保护 Over-Current Protection	
		≥120%Io 自恢复 Self-recovery	
安全&EMC Safety&EMC requirement		短路保护 Short Circuit Protection	
		打隔式,可长期短路,自恢复 Hiccup, Continuous short capable, Self-recovery	
可靠性 Reliability Requirement		工作环境温度 Ambient Temperature	
		-25°C ~ 85°C (Refer to derating curve)	
		工作环境湿度 Ambient Humidity	
		10~90% RH (无冷凝 No Condensing) at full load	
MTBF(MIL-HDBK-217F)		存储温度 Storage Temperature	
		-40°C ~ 105°C	
老化测试 Burn-In Test		存储湿度 Storage Humidity	
		5%~95%	
设计参考标准 Reference Safety Standards		绝缘强度 Dielectric Strength	
		Input-Output ≥3000Vac 5mA 60S	
EMI filter 需外接电容 Need an external capacitance		设计参考标准 Reference Safety Standards	
		UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
传导骚扰 CE		EMI filter 需外接电容 Need an external capacitance	
		Meet CISPR22/EN55022 , CLASS B	
辐射骚扰 RE		辐射骚扰 RE	
		Meet CISPR22/EN55022, CLASS B	

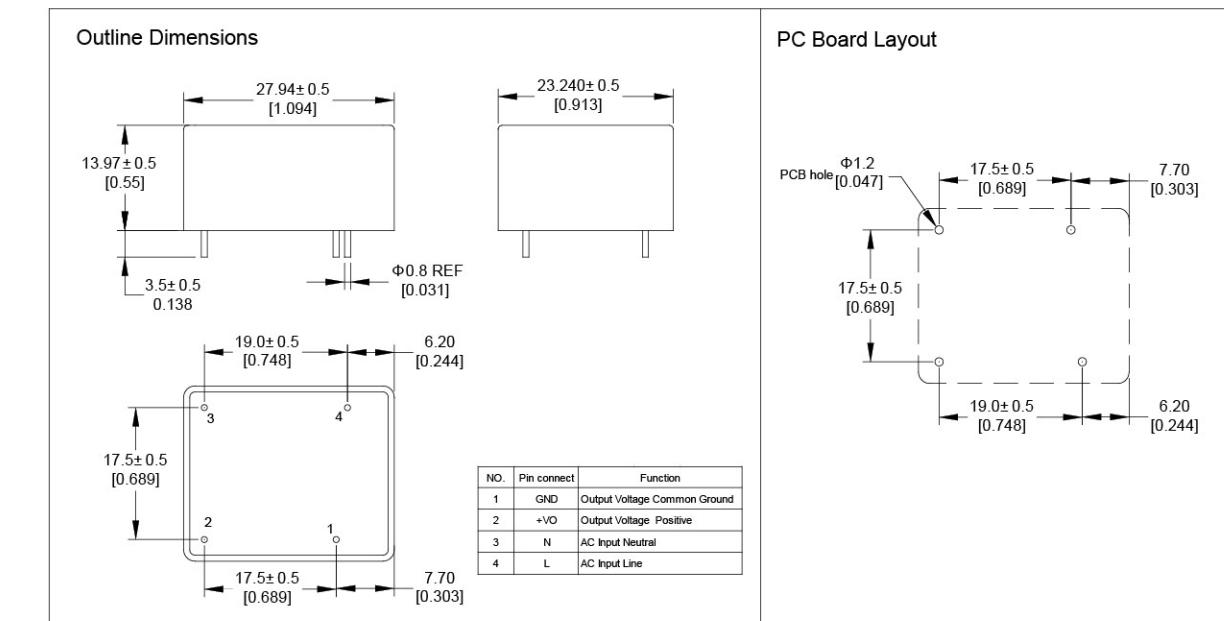
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



典型应用电路 TYPICAL APPLICATION SCHEMATIC



尺寸图 MECHANICAL SPECIFICATION



ZP03 MINI SERIES:[3W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: -25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: -25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: -40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温): >300000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

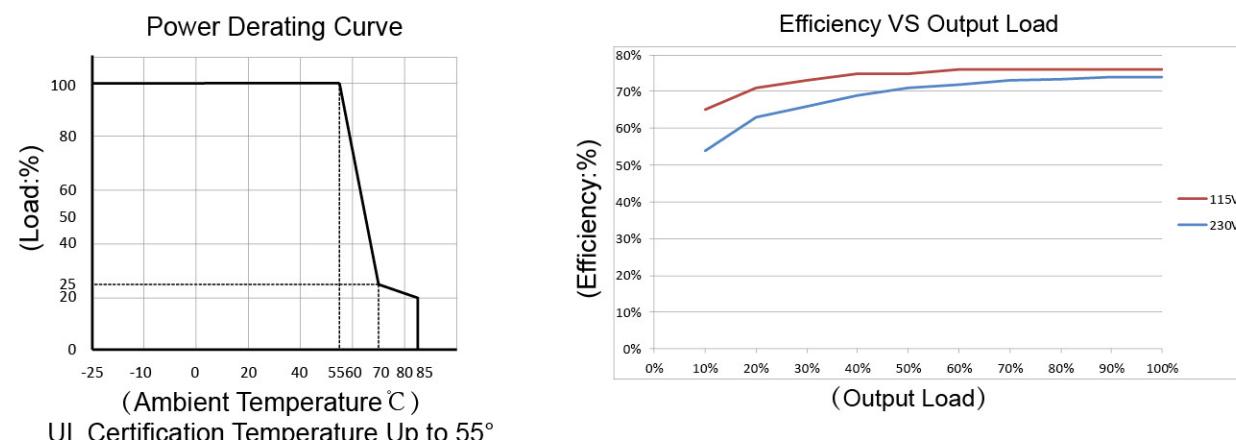
型号列表 MODEL LIST

Part No.,	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight	Certificate	UL
ZP03S0500WE	3W	5Vdc	600mA	66%	<5% Vout	50	15g	●	
ZP03S0600WE	3W	6Vdc	500mA	68%	<5% Vout	50	15g	●	
ZP03S0700WE	3W	7.5Vdc	400mA	70%	<5% Vout	50	15g	●	
ZP03S0800WE	3W	8Vdc	375mA	70%	<5% Vout	50	15g	●	
ZP03S0900WE	3W	9Vdc	333mA	70%	<5% Vout	50	15g	●	
ZP03S1000WE	3W	10Vdc	300mA	70%	<5% Vout	50	15g	●	
ZP03S1200WE	3W	12Vdc	250mA	72%	<5% Vout	50	15g	●	
ZP03S1500WE	3W	15Vdc	200mA	72%	<5% Vout	50	15g	●	
ZP03S1800WE	3W	18Vdc	166mA	74%	<5% Vout	50	15g	●	
ZP03S2400WE	3W	24Vdc	125mA	74%	<5% Vout	50	15g	●	

电性能 ELECTRONIC SPECIFICATION

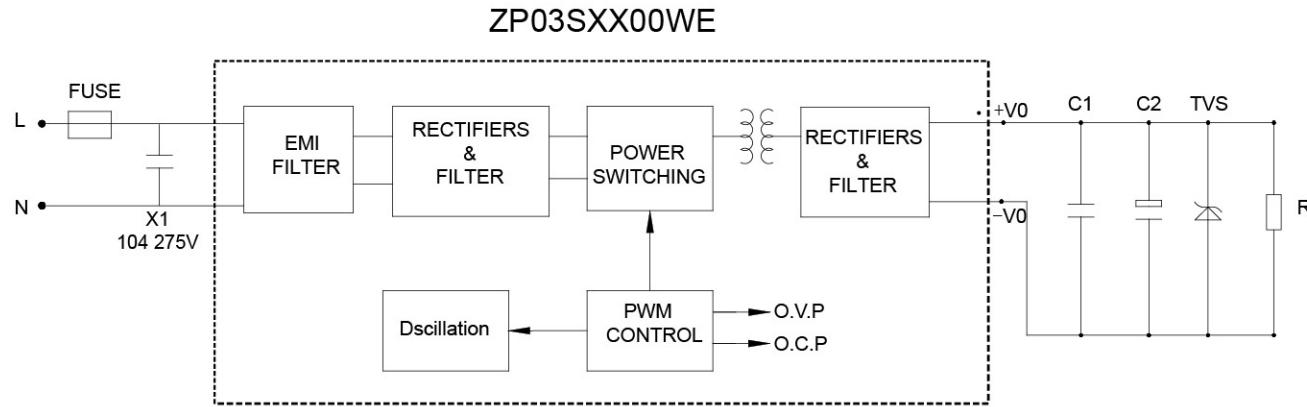
	项目 Item	规格 Specification
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac 70mA
	冲击电流 Inrush Current	115Vac 10A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
	输出电压精度 Output Voltage Accuracy	±5%
	线性调节率 Line Regulation	±1%
输出 Output	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	15.9ms/230Vac 23.8ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	20ms/230Vac 10ms/115Vac
	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery
环境 Ambient	工作环境温度 Ambient Temperature	-25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	-40°C ~ 105°C
	存储湿度 Storage Humidity	5%~95%
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	Meet CISPR22/EN55022 , CLASS B
	辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test	输入 264Vac, 常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

产品特性曲线 PRODUCT CHARACTERISTIC CURVE

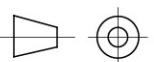


UL Certification Temperature Up to 55°

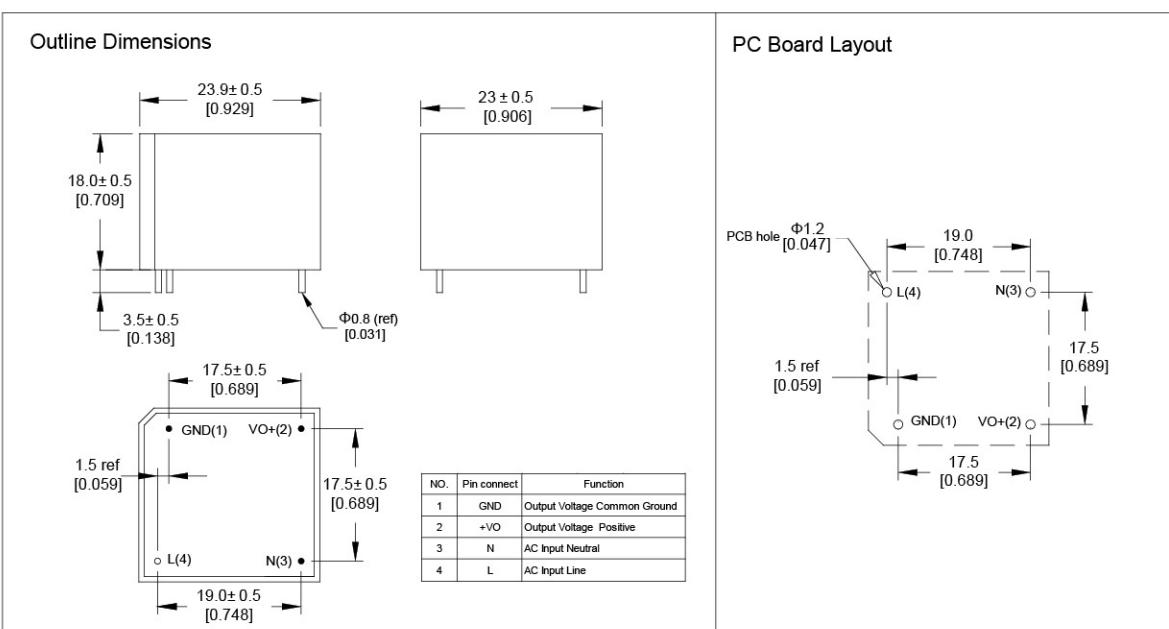
典型应用电路 TYPICAL APPLICATION SCHEMATIC



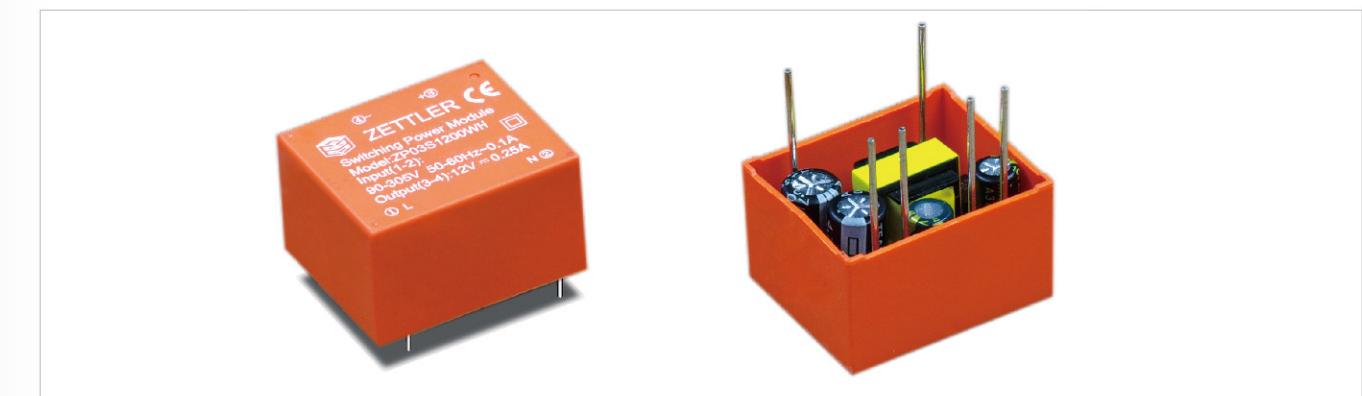
尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



ZP03 STANDARD SERIES:[3W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC~265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温): >300000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

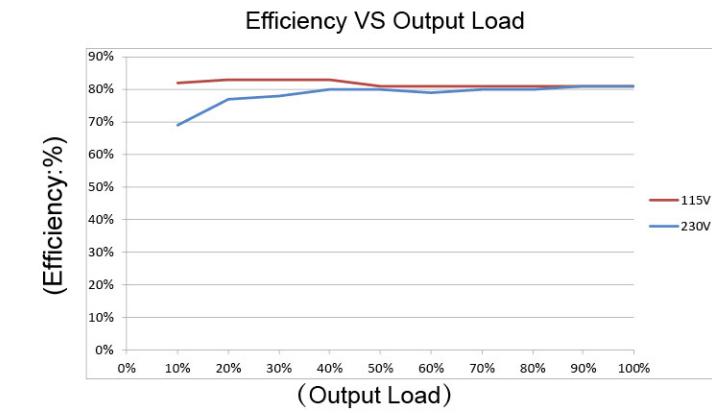
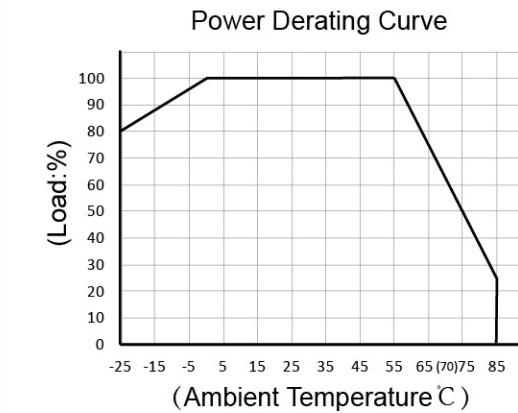
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP03S0300WH	3W	3.3Vdc	606mA	66%	<5% Vout	55	15g
ZP03S0500WH	3W	5Vdc	400mA	66%	<5% Vout	55	15g
ZP03S0600WH	3W	6Vdc	500mA	70%	<4% Vout	55	15g
ZP03S0700WH	3W	7.5Vdc	400mA	70%	<4% Vout	55	15g
ZP03S0800WH	3W	8Vdc	375mA	72%	<4% Vout	55	15g
ZP03S0900WH	3W	9Vdc	333mA	72%	<3% Vout	55	15g
ZP03S1000WH	3W	10Vdc	300mA	72%	<3% Vout	55	15g
ZP03S1200WH	3W	12Vdc	250mA	74%	<3% Vout	55	15g
ZP03S1500WH	3W	15Vdc	200mA	74%	<3% Vout	55	15g
ZP03S1800WH	3W	18Vdc	166mA	75%	<2% Vout	55	15g
ZP03S2400WH	3W	24Vdc	125mA	75%	<2% Vout	55	15g

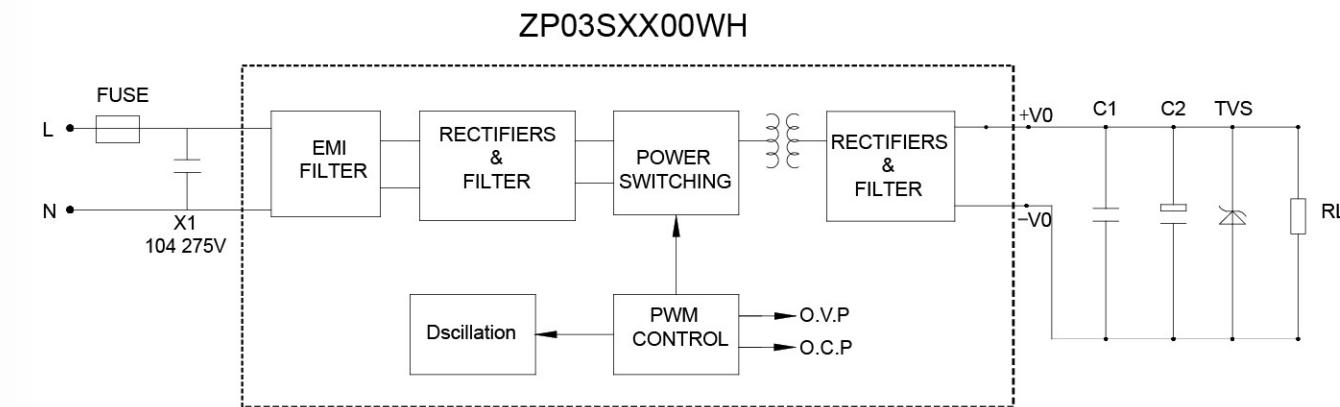
电性能 **ELECTRONIC SPECIFICATION**

项目 Item		规格 Specification	
输入 Input		输入电压范围 Input Voltage Range	
		85~265Vac or 100~370Vdc	
		输入频率范围 AC Input Frequency Range	
		47~63Hz	
		输入电流 Input Current	
		115Vac	230Vac
		60mA	35mA
		冲击电流 Inrush Current	115Vac 230Vac
		10A	20A
待机功耗 Stand-by Power Consumption		0.3W Max	
外接保险管推荐值 Recommended External Input Fuse		1A/250V 慢断(Time lag)	
热插拔 Hot Plug		不支持(Unavailable)	
输出 Output		输出电压精度 Output Voltage Accuracy	
		±5%	
		线性调节率 Line Regulation	
		±1%	
		负载调节率 Load Regulation	
		±1%	
		温度漂移系数 Temperature Drift Factor	
		±0.05%/°C (0~85°C)	
保护特性 Protection Characteristics		最小负载 Min. Load	
		0	
满载开机上升时间 Set-Up Time At Full Load		81.8ms/230Vac	79ms/115Vac
满载掉电保持时间(典型值) Hold-up Time At Full Load		57.8ms/230Vac	10.6ms/115Vac
环境 Ambient		过流保护 Over-Current Protection	
		≥120%Io 自恢复 Self-recovery	
		短路保护 Short Circuit Protection	
		打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery	
安全&EMC Safety&EMC requirement		工作环境温度 Ambient Temperature	
		- 25°C ~ 85°C (Refer to derating curve)	
		工作环境湿度 Ambient Humidity	
		10~90% RH (无冷凝 No Condensing) at full load	
可靠性 Reliability Requirement		存储温度 Storage Temperature	
		- 40°C ~ 105°C	
		存储湿度 Storage Humidity	
		5%~95%	
		绝缘强度 Dielectric Strength	
		Input-Output ≥3000Vac 5mA 60S	
		设计参考标准 Reference Safety Standards	
		UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
EMI filter 需外接电容 Need an external capacitance	传导骚扰 CE	Meet CISPR22/EN55022, CLASS B	
	辐射骚扰 RE		
		Meet CISPR22/EN55022, CLASS B	
MTBF(MIL-HDBK-217F)		300Khrs Min @230VAC input 25°C	
老化测试 Burn-In Test		输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature	

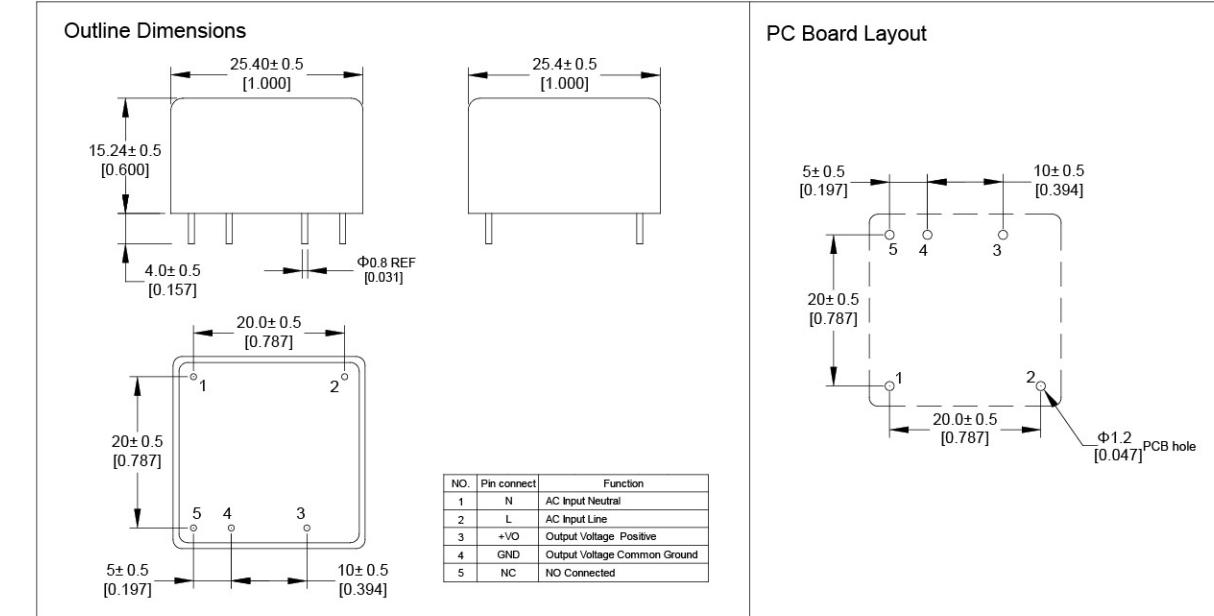
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



尺寸图 **MECHANICAL SPECIFICATION**



ZP05 MINI SERIES:[5W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

APPLICATIONS

该系列产品在LED、灯光控制，仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

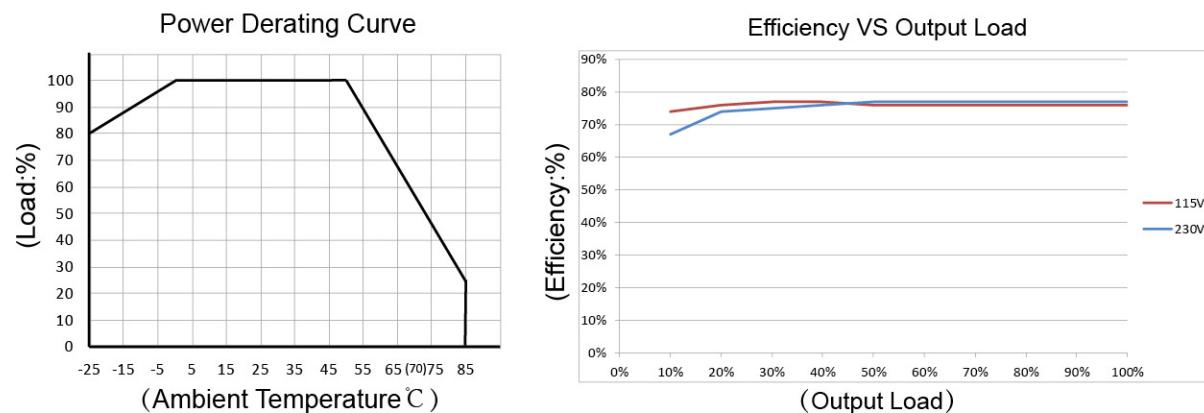
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP05S0500WH	5W	5Vdc	1000mA	68%	<5% Vout	50	25g
ZP05S0900WH	5W	9Vdc	555mA	70%	<5% Vout	50	25g
ZP05S1200WH	5W	12Vdc	417mA	70%	<5% Vout	50	25g
ZP05S1500WH	5W	15Vdc	333mA	70%	<5% Vout	50	25g
ZP05S1800WH	5W	18Vdc	278mA	70%	<5% Vout	50	25g
ZP05S2400WH	5W	24Vdc	208mA	70%	<5% Vout	50	25g

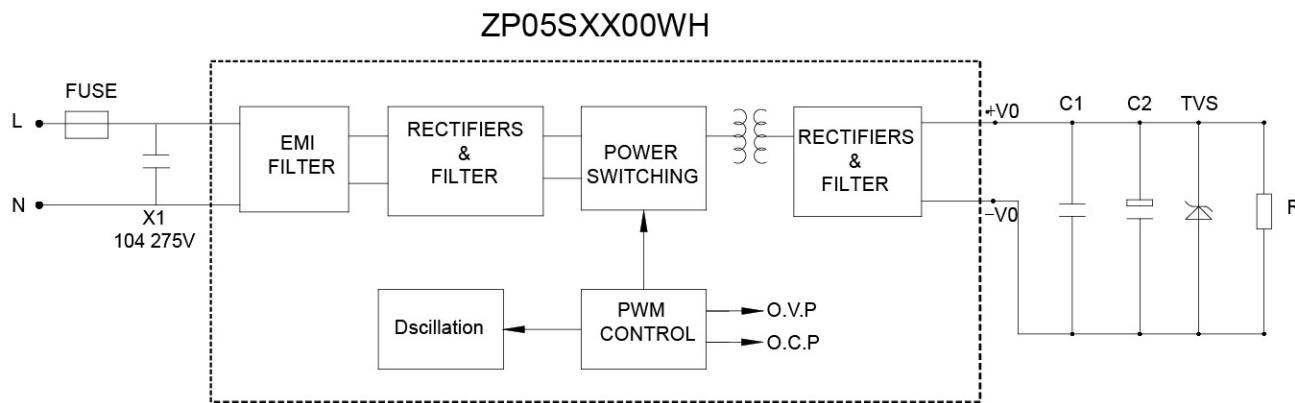
电性能 ELECTRONIC SPECIFICATION

项目 Item	规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac 230Vac 96mA 60mA
	冲击电流 Surge Current	115Vac 230Vac 10A 20A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
输出 Output	输出电压精度 Output Voltage Accuracy	±5%
	线性调节率 Line Regulation	±1%
	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	19.7ms/230Vac 23.5ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	21.2ms/230Vac 18.1ms/115Vac
	过流保护 Over-Circuit Protection	≥120%Io 自恢复 Self-recovery
环境 Ambient	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery
	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	- 40°C ~ 105°C
安全&EMC Safety&EMC requirement	存储湿度 Storage Humidity	5%~95%
	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	传导骚扰 CE Meet CISPR22/EN55022 , CLASS B 辐射骚扰 RE Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

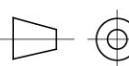
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



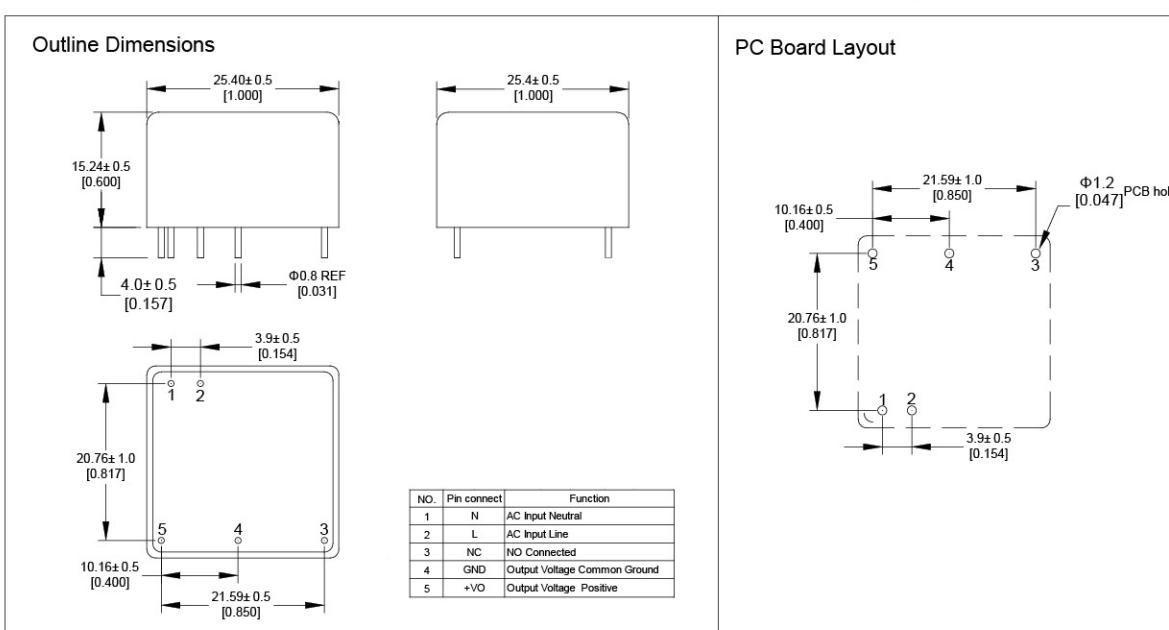
典型应用电路 TYPICAL APPLICATION SCHEMATIC



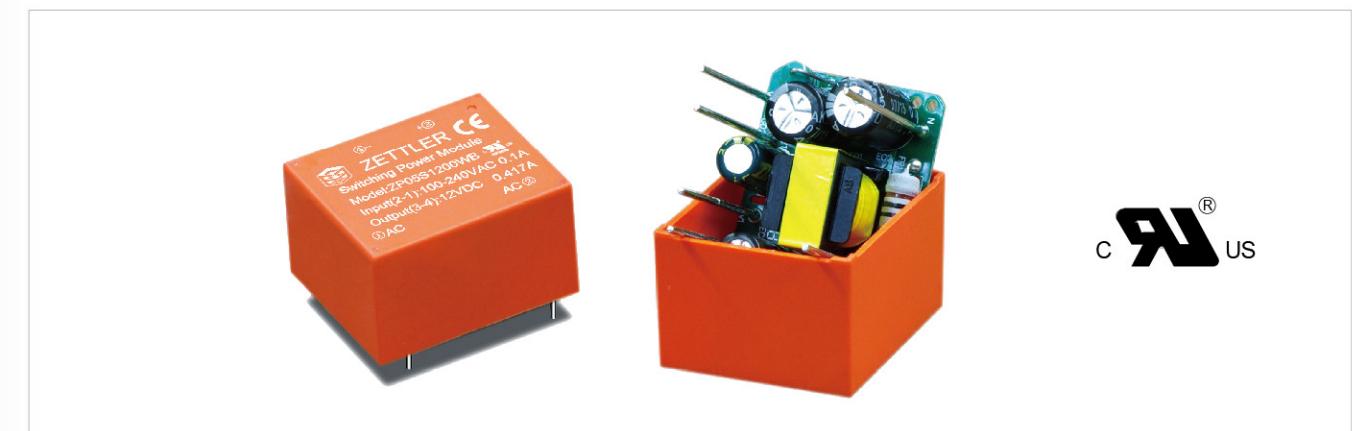
尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



ZP05 ECONOMIC SERIES:[5W]



C US

FEATURES

- Switching Power Module for PCB Mount
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): < 0.1mA
- Isolation voltage: Input-Output ≥ 3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥ 100M Ohms
- MTBF(at 25°C 70%RH environment): > 300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温常湿): >300000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

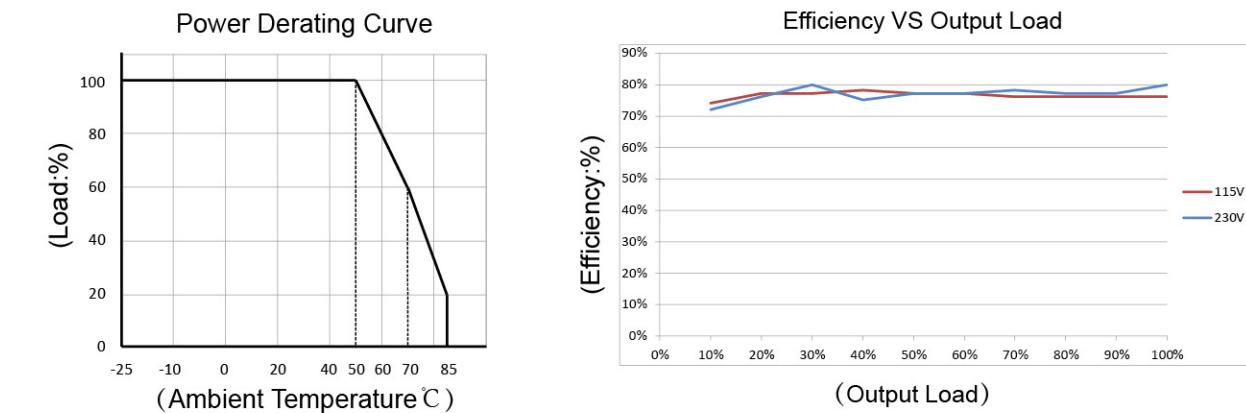
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight	Certificate	
								UL	CB
ZP05S0300WB	5W	3.3Vdc	1510mA	65%	<5% Vout	55	30g	●	●
ZP05S0500WB	5W	5Vdc	1000mA	70%	<5% Vout	55	30g	●	●
ZP05S0600WB	5W	6Vdc	830mA	70%	<5% Vout	55	50g	●	●
ZP05S0700WB	5W	7.5Vdc	670mA	70%	<5% Vout	55	50g	●	●
ZP05S0900WB	5W	9Vdc	550mA	70%	<5% Vout	55	50g	●	●
ZP05S1200WB	5W	12Vdc	420mA	70%	<5% Vout	55	50g	●	●
ZP05S1500WB	5W	15Vdc	330mA	70%	<5% Vout	55	50g	●	●
ZP05S1800WB	5W	18Vdc	280mA	70%	<5% Vout	55	50g	●	●
ZP05S2400WB	5W	24Vdc	210mA	70%	<5% Vout	55	50g	●	●

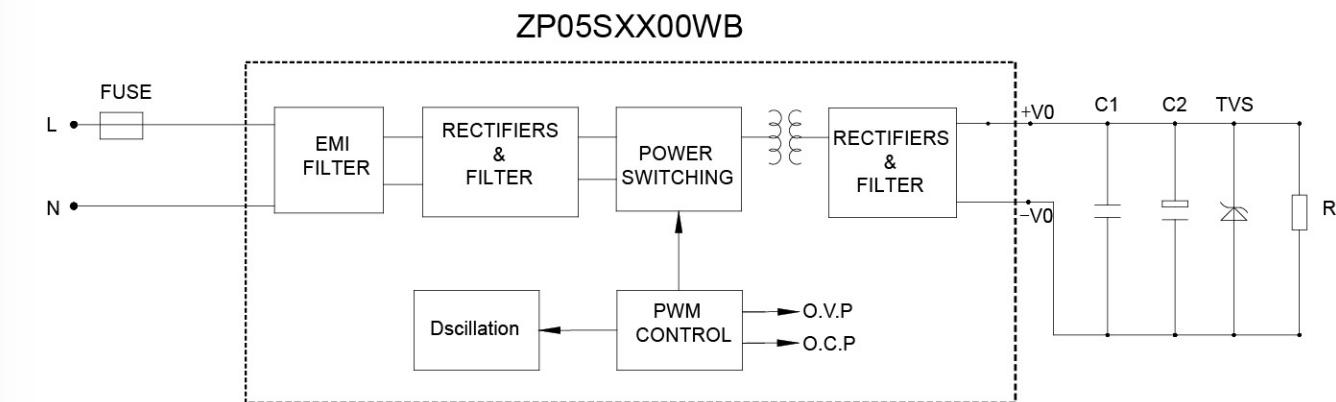
电性能 **ELECTRONIC SPECIFICATION**

项目 Item	规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac
		100mA
	冲击电流 Surge Current	230Vac
		10A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)
输出 Output	热插拔 Hot Plug	不支持(Unavailable)
	输出电压精度 Output Voltage Accuracy	±5%
	线性调节率 Line Regulation	±1%
	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	38.9ms/230Vac 68.8ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	63.2ms/230Vac 12.2ms/115Vac
保护特性 Protection Characteristics	过流保护 Over-Circuit Protection	≥120%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	- 40°C ~ 105°C
	存储湿度 Storage Humidity	5%~95%
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	传导骚扰 CE Meet CISPR22/EN55022 , CLASS B
	辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test	输入 264Vac,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

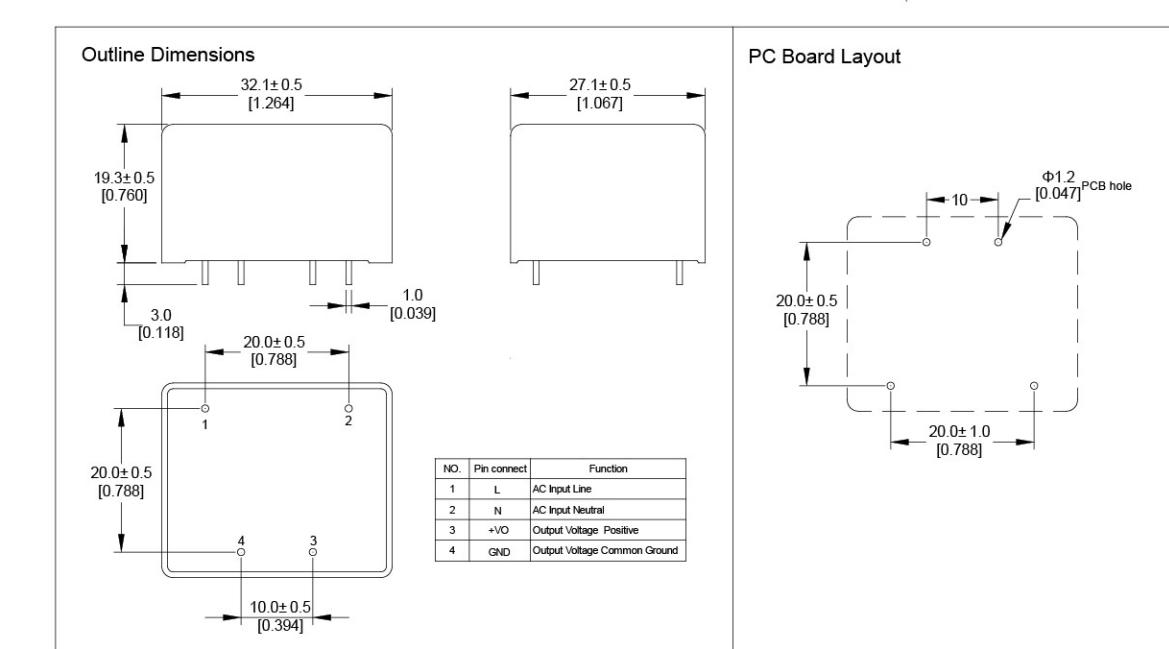
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



尺寸图 **MECHANICAL SPECIFICATION**



ZP05 STANDARD SERIES:[5W]



FEATURES

- Switching Power Module for PCB Mount
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: -25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

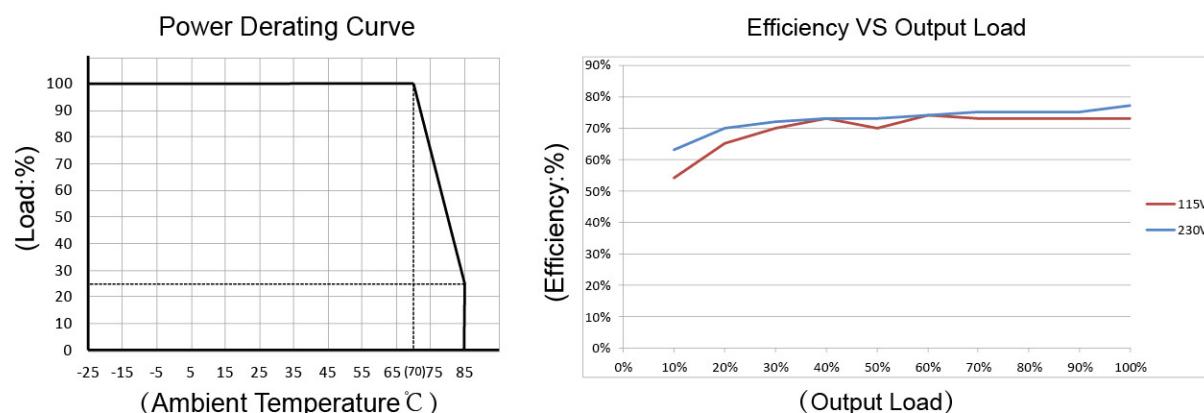
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight	Certificate		
								TUV	CB	UL
ZP05S0500W	5W	5Vdc	1000mA	70%	<1% Vout	70	50g	●	●	●
ZP05S0600W	5W	6Vdc	830mA	70%	<1% Vout	70	50g	●	●	●
ZP05S0700W	5W	7.5Vdc	667mA	70%	<1% Vout	70	50g	●	●	●
ZP05S0900W	5W	9Vdc	555mA	70%	<1% Vout	70	50g	●	●	
ZP05S1000W	5W	10Vdc	500mA	70%	<1% Vout	70	50g	●	●	
ZP05S1200W	5W	12Vdc	417mA	70%	<1% Vout	70	50g	●	●	
ZP05S1500W	5W	15Vdc	300mA	70%	<1% Vout	70	50g	●	●	
ZP05S1800W	5W	18Vdc	277mA	70%	<1% Vout	70	50g	●	●	
ZP05S2400W	5W	24Vdc	208mA	70%	<1% Vout	70	50g	●	●	

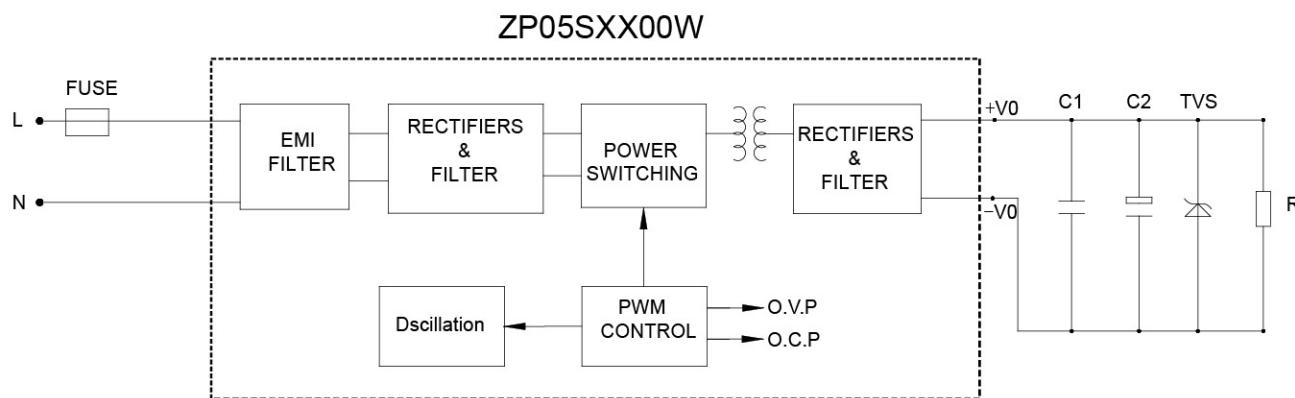
电性能 ELECTRONIC SPECIFICATION

	项目 Item	规格 Specification
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac 100mA
	冲击电流 Surge Current	115Vac 10A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
	输出电压精度 Output Voltage Accuracy	±3%
	线性调节率 Line Regulation	±0.5%
	负载调节率 Load Regulation	±0.5%
输出 Output	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	149ms/230Vac 248ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	62.4ms/230Vac 10.6ms/115Vac
	过流保护 Over-Circuit Protection	≥120%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery
	工作环境温度 Ambient Temperature	-25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
环境 Environmental	存储温度 Storage Temperature	-40°C ~ 105°C
	存储湿度 Storage Humidity	5%~95%
	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	Meet CISPR22/EN55022 , CLASS B
安全&EMC Safety&EMC requirement	辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature
可靠性 Reliability Requirement		

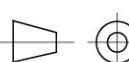
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



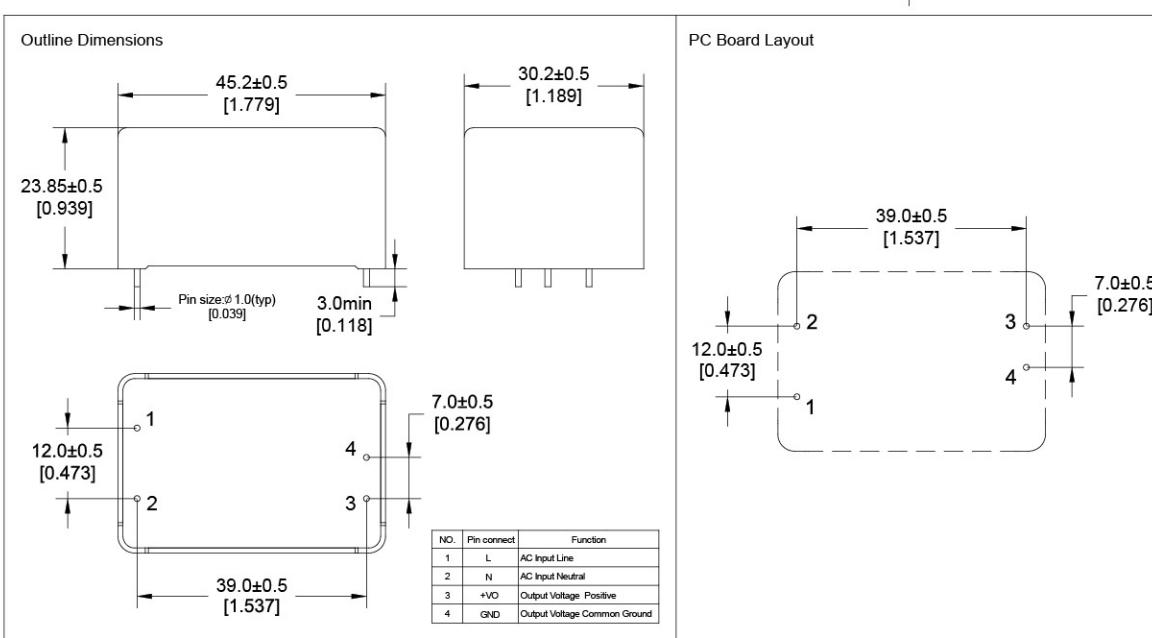
典型应用电路 TYPICAL APPLICATION SCHEMATIC



尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



ZP05D SERIES:[5W]



FEATURES

- Switching Power Module for PCB Mount
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): < 0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation.
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.1mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温常湿): >300000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

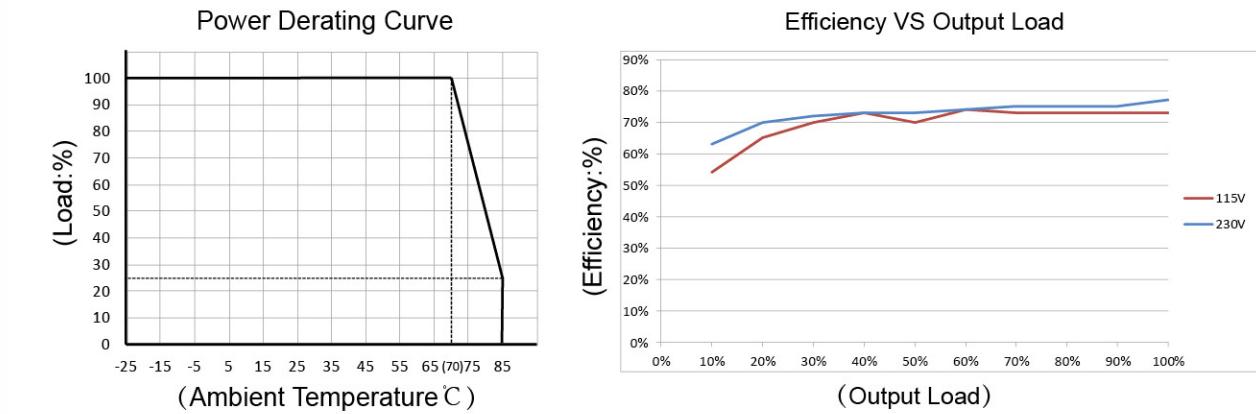
型号列表 MODEL LIST

Part No.	Output S1		Output S2		Efficiency 230VAC, % Typ.	Ripple & Noise	Ambient TEMP(°C)	Weight	Certificate
	DC Voltage	Rated Current	DC Voltage	Rated Current					
ZP05D0505W	5Vdc±3%	500mA	5Vdc±10%	500mA	70%	<1% Vout	70	50g	●
ZP05D0606W	6Vdc±3%	416mA	6Vdc±10%	416mA	70%	<1% Vout	70	50g	●
ZP05D0707W	7Vdc±3%	357mA	7Vdc±10%	357mA	70%	<1% Vout	70	50g	●
ZP05D0909W	9Vdc±3%	278mA	9Vdc±10%	278mA	70%	<1% Vout	70	50g	●
ZP05D1010W	10Vdc±3%	250mA	10Vdc±10%	250mA	70%	<1% Vout	70	50g	●
ZP05D1212W	12Vdc±3%	208mA	12Vdc±10%	208mA	70%	<1% Vout	70	50g	●
ZP05D1515W	15Vdc±3%	167mA	15Vdc±10%	167mA	70%	<1% Vout	70	50g	●
ZP05D1818W	18Vdc±3%	139mA	18Vdc±10%	139mA	70%	<1% Vout	70	50g	●
ZP05D2424W	24Vdc±3%	104mA	24Vdc±10%	104mA	70%	<1% Vout	70	50g	●
ZP05D0312W	3.3Vdc±3%	454mA	12Vdc±10%	291mA	70%	<1% Vout	70	50g	●
ZP05D0512W	5Vdc±3%	300mA	12Vdc±10%	291mA	70%	<1% Vout	70	50g	●
ZP05D0712W	7Vdc±3%	214mA	12Vdc±10%	291mA	70%	<1% Vout	70	50g	●

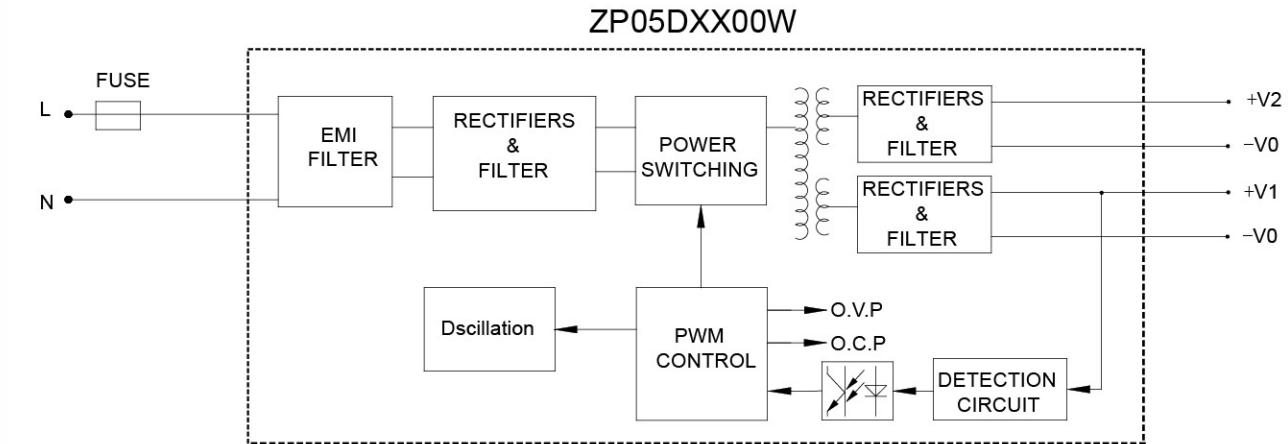
电性能 **ELECTRONIC SPECIFICATION**

项目 Item	规格 Specification		
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc	
	输入频率范围 AC Input Frequency Range	47~63Hz	
	输入电流 Input Current	115Vac	230Vac
		60mA	35mA
	冲击电流 Surge Current	115Vac	230Vac
		6A	10A
	待机功耗 Stand-by Power Consumption	0.3W Max	
	外接保险管推荐值 Recommended External Input Fuse	1A/250V 慢断(Time lag)	
输出 Output	热插拔 Hot Plug	不支持(Unavailable)	
	输出电压精度 Output Voltage Accuracy	S1: ±3% S2: ±10%	
	线性调节率 Line Regulation	±1%	
	负载调节率 Load Regulation	±1%	
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)	
	最小负载 Min. Load	0	
	满载开机上升时间 Set-Up Time At Full Load	149ms/230Vac	248ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	62.4ms/230Vac	10.6ms/115Vac
保护特性 Protection Characteristics	过流保护 Over-Circuit Protection	≥120%Io 自恢复 Self-recovery	
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery	
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)	
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load	
	存储温度 Storage Temperature	- 40°C ~ 105°C	
	存储湿度 Storage Humidity	5%~95%	
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S	
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
	EMI filter 需外接电容	传导骚扰 CE	Meet CISPR22/EN55022 , CLASS B
	辐射骚扰 RE		Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C	
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature	

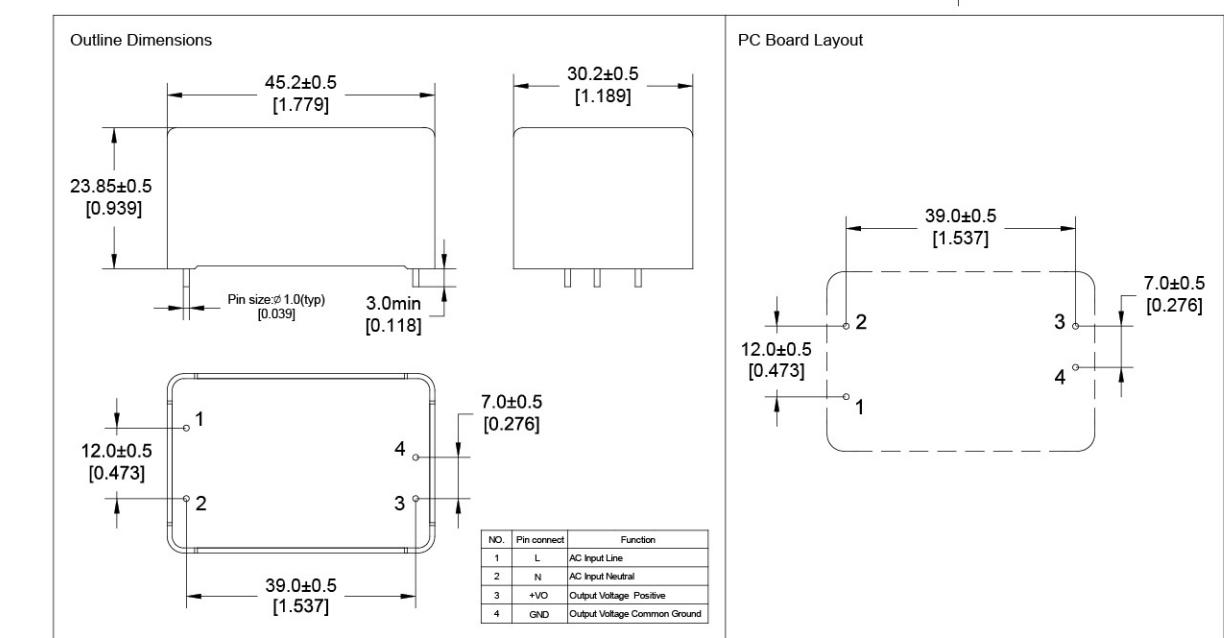
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



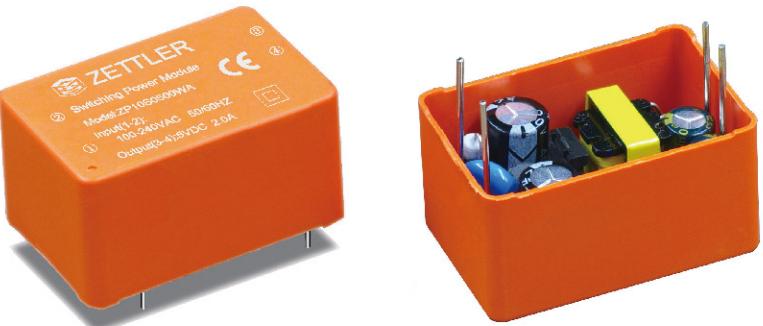
典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



尺寸图 **MECHANICAL SPECIFICATION**



ZP10 MINI SERIES:[10W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: -25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

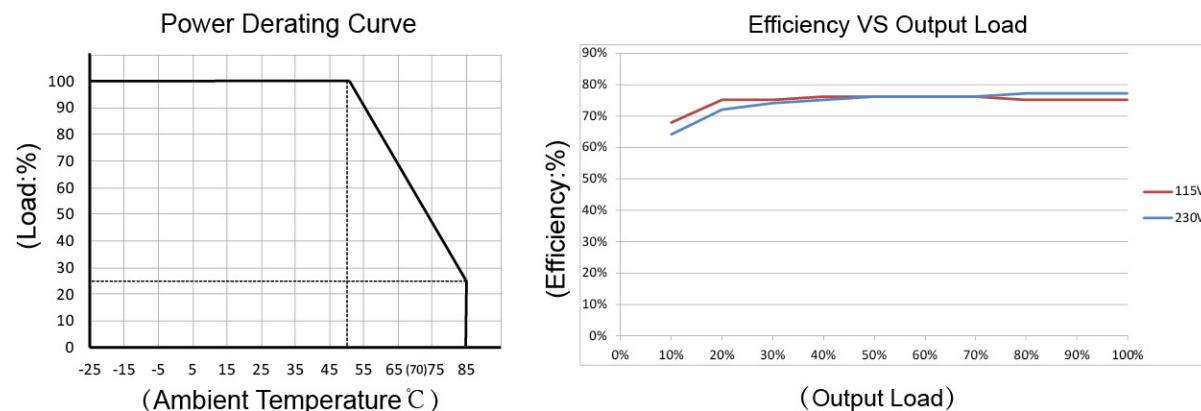
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP10S0300WA	10W	3.3Vdc	3000mA	65%	<2% Vout	50	50g
ZP10S0500WA	10W	5Vdc	2000mA	70%	<2% Vout	50	50g
ZP10S0600WA	10W	6Vdc	1666mA	70%	<2% Vout	50	50g
ZP10S0700WA	10W	7.5Vdc	1333mA	70%	<2% Vout	50	50g
ZP10S0900WA	10W	9Vdc	1111mA	70%	<2% Vout	50	50g
ZP10S1000WA	10W	10Vdc	1000mA	70%	<2% Vout	50	50g
ZP10S1200WA	10W	12Vdc	833mA	70%	<2% Vout	50	50g
ZP10S1500WA	10W	15Vdc	666mA	70%	<2% Vout	50	50g
ZP10S1800WA	10W	18Vdc	555mA	70%	<2% Vout	50	50g
ZP10S2400WA	10W	24Vdc	416mA	70%	<2% Vout	50	50g
ZP10S4800WA	10W	48Vdc	208mA	70%	<2% Vout	50	50g

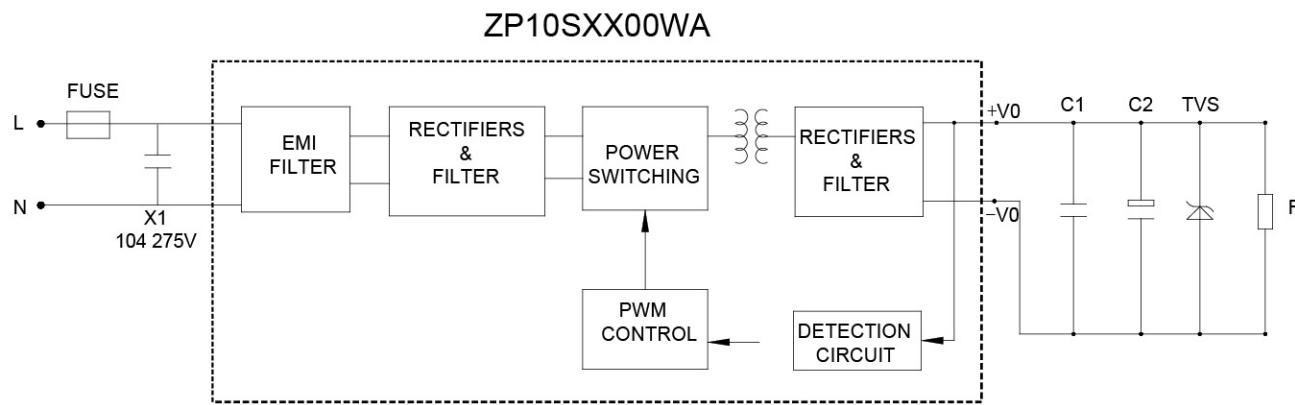
电性能 ELECTRONIC SPECIFICATION

项目 Item	规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~63Hz
	输入电流 Input Current	115Vac 230Vac 200mA 120mA
	冲击电流 Inrush Current	115Vac 230Vac 30A 60A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	2A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
输出 Output	输出电压精度 Output Voltage Accuracy	±5%
	线性调节率 Line Regulation	±1%
	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	253ms/230Vac 169ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	76.9ms/230Vac 13.6ms/115Vac
保护特性 Protection Characteristics	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery
环境 Ambient	工作环境温度 Ambient Temperature	-25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	-40°C ~ 105°C
	存储湿度 Storage Humidity	5%~95%
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16
	EMI filter 需外接电容 Need an external capacitance	Meet CISPR22/EN55022 , CLASS B
	辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

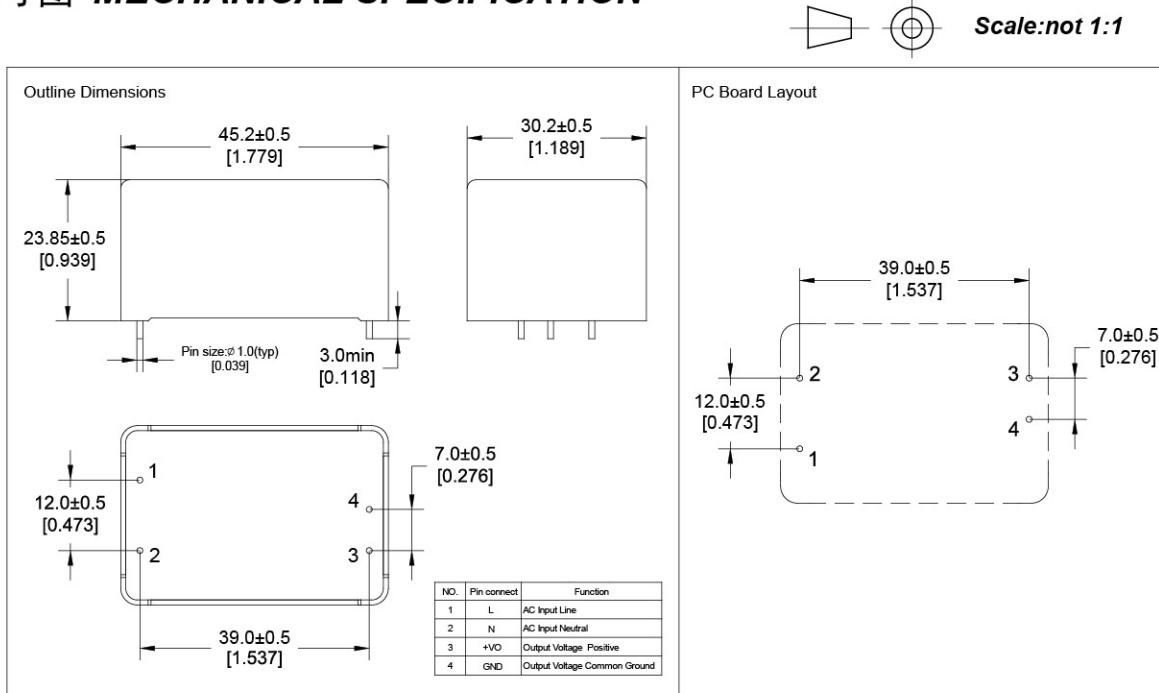
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



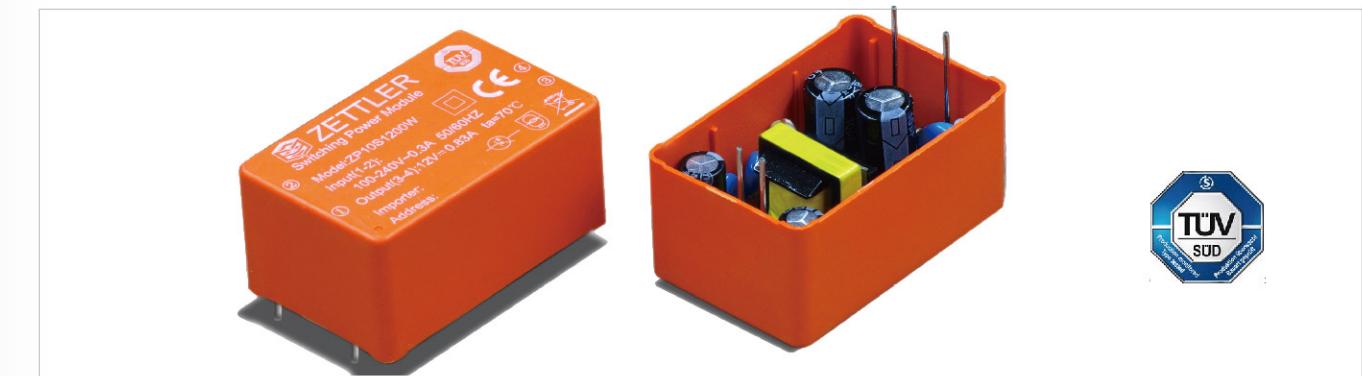
典型应用电路 TYPICAL APPLICATION SCHEMATIC



尺寸图 MECHANICAL SPECIFICATION



ZP10 STANDARD SERIES: [10W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: -25°C ~ 85°C (Refer to derating curve)
- Storage temperature range: -40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance: Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >300000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

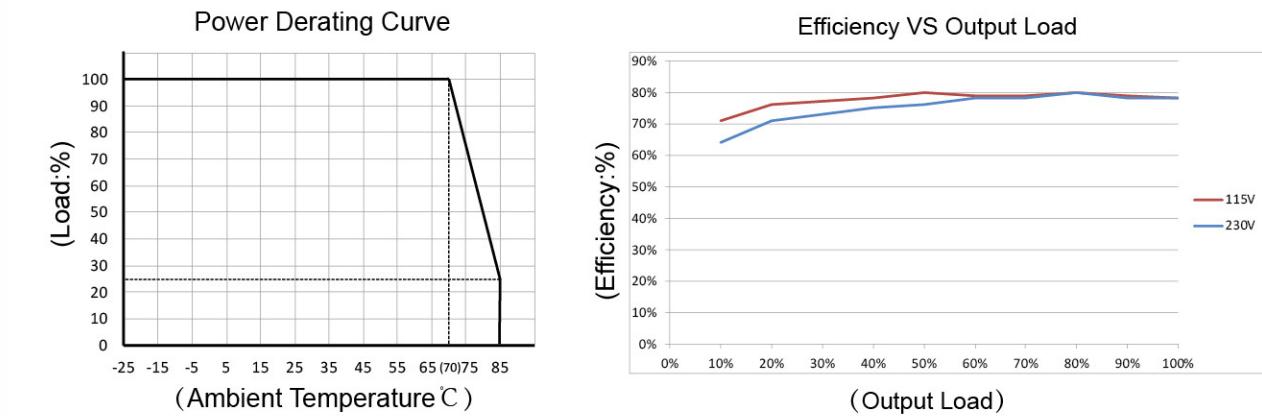
型号列表 MODEL LIST

Part No.,	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.		Ripple& Noise(max)	Ambient TEMP(°C)	Weight	Certificate	
				TUV	CB				TUV	CB
ZP10S0300W	10W	3.3Vdc	3000mA	72%	<1% Vout	70	70g	●	●	●
ZP10S0500W	10W	5Vdc	2000mA	72%	<1% Vout	70	70g	●	●	●
ZP10S0600W	10W	6Vdc	1670mA	72%	<1% Vout	70	70g	●	●	●
ZP10S0700W	10W	7.5Vdc	1330mA	72%	<1% Vout	70	70g	●	●	●
ZP10S0800W	10W	8Vdc	1250mA	72%	<1% Vout	70	70g	●	●	●
ZP10S0900W	10W	9Vdc	1110mA	72%	<1% Vout	70	70g	●	●	●
ZP10S1000W	10W	10Vdc	1000mA	72%	<1% Vout	70	70g	●	●	●
ZP10S1200W	10W	12Vdc	830mA	72%	<1% Vout	70	70g	●	●	●
ZP10S1500W	10W	15Vdc	660mA	72%	<1% Vout	70	70g	●	●	●
ZP10S1800W	10W	18Vdc	550mA	72%	<1% Vout	70	70g	●	●	●
ZP10S2400W	10W	24Vdc	420mA	72%	<1% Vout	70	70g	●	●	●

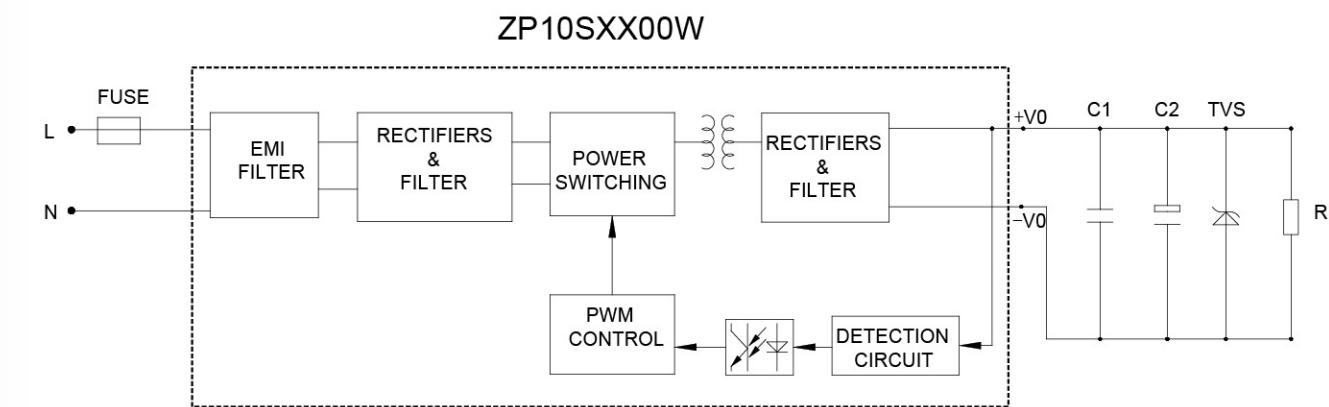
电性能 ELECTRONIC SPECIFICATION

项目 Item		规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc	
	输入频率范围 AC Input Frequency Range	47~63Hz	
	输入电流 Input Current	115Vac	230Vac
		200mA	120mA
	冲击电流 Inrush Current	115Vac	230Vac
		20A	40A
	待机功耗 Stand-by Power Consumption	0.3W Max	
	外接保险管推荐值 Recommended External Input Fuse	2A/250V 慢断(Time lag)	
输出 Output	热插拔 Hot Plug	不支持(Unavailable)	
	输出电压精度 Output Voltage Accuracy	±3%	
	线性调节率 Line Regulation	±0.5%	
	负载调节率 Load Regulation	±0.5%	
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)	
	最小负载 Min. Load	0	
	满载开机上升时间 Set-Up Time At Full Load	149ms/230Vac	248ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	62.4ms/230Vac	10.6ms/115Vac
保护特性 Protection Characteristics	过流保护 Over-Current Protection	≥120%Io 自恢复 Self-recovery	
	短路保护 Short Circuit Protection	打隔式, 可长期短路,自恢复 Hiccup, Continuous short capable, Self-recovery	
环境 Environmental	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)	
	工作环境湿度 Ambient Humidity	10~90% RH (无冷凝 No Condensing) at full load	
	存储温度 Storage Temperature	- 40°C ~ 105°C	
	存储湿度 Storage Humidity	5%~95%	
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S	
	设计参考标准 Reference Safety Standards	UL/CUL60920 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16	
	EMI filter 需外接电容 Need an external capacitance	传导骚扰 CE	Meet CISPR22/EN55022 , CLASS B
		辐射骚扰 RE	Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)		300Khrs Min @230VAC input 25°C
	老化测试 Burn-In Test		输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

► 产品特性曲线 PRODUCT CHARACTERISTIC CURVE



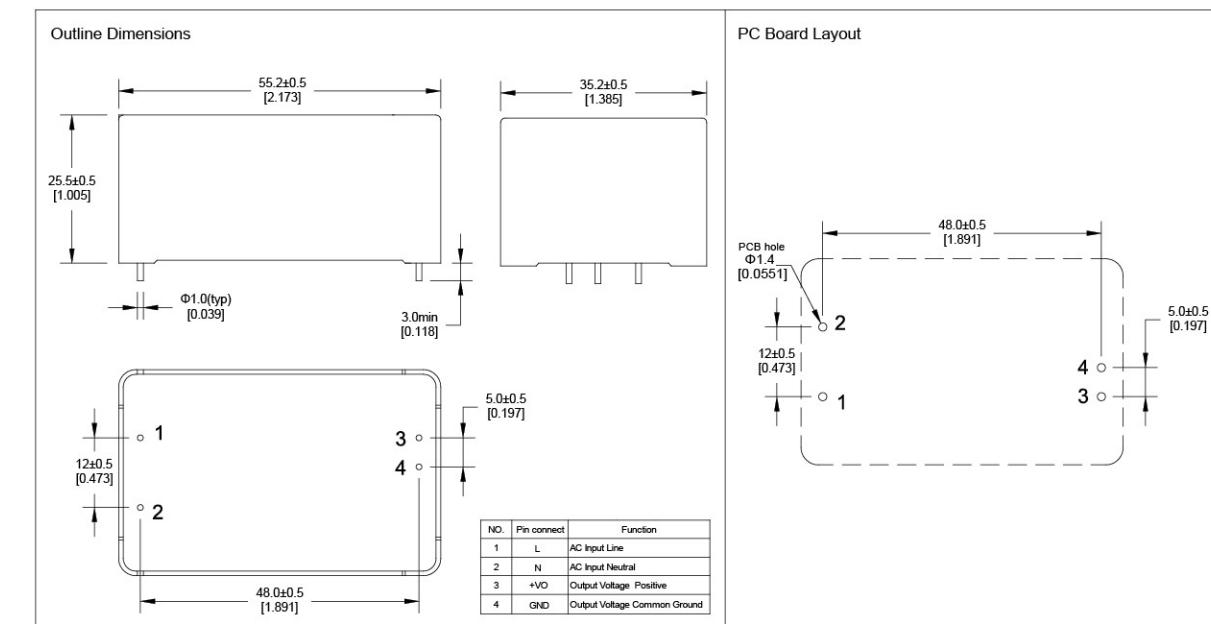
典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



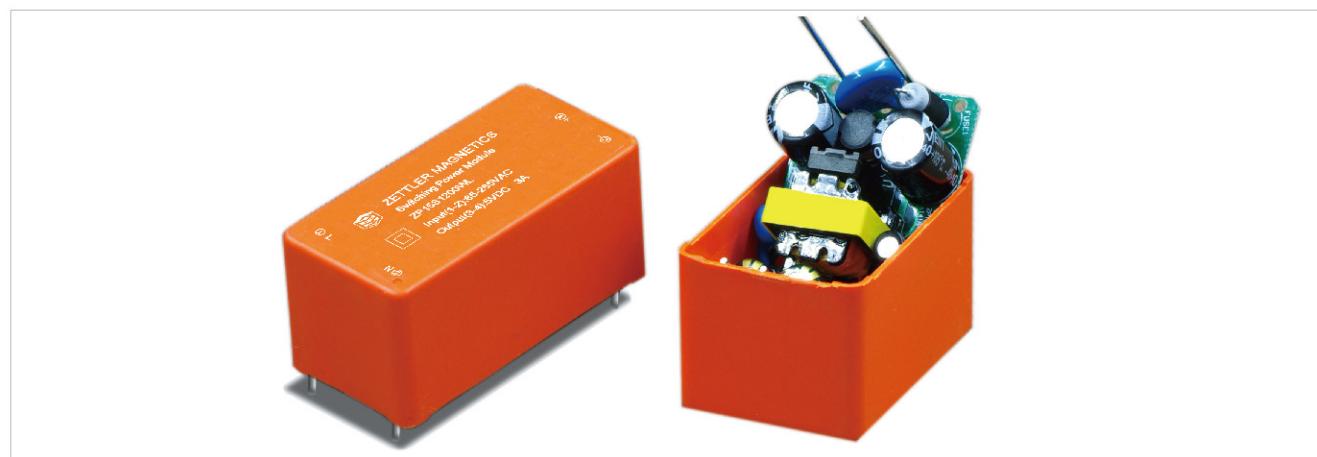
尺寸图 MECHANICAL SPECIFICATION



Scale: not 1:1



ZP15 STANDARD SERIES:[15W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.1mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >970000hrs
- Compact size, easy installation.
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.25mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温常湿): >970000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制, 仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

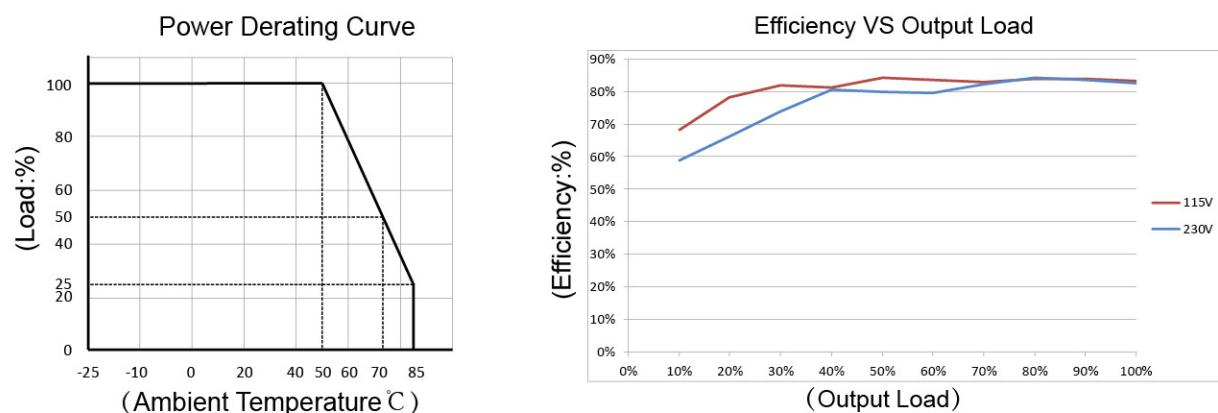
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP15S0300WL	11.55W	3.3Vdc	3.5A	74%	200mVp-p	50	59g
ZP15S0500WL	15W	5Vdc	3A	78%	200mVp-p	50	59g
ZP15S1200WL	15W	12Vdc	1.25A	82%	200mVp-p	50	59g
ZP15S1500WL	15W	15Vdc	1A	82%	200mVp-p	50	59g
ZP15S2400WL	15W	24Vdc	0.63A	83%	200mVp-p	50	59g

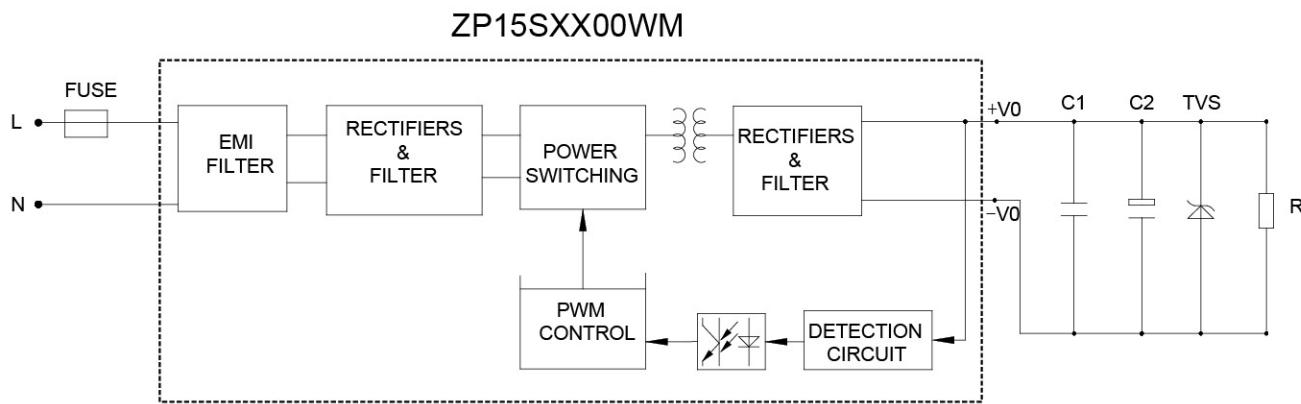
电性能 ELECTRONIC SPECIFICATION

项目 Item	规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc
	输入频率范围 AC Input Frequency Range	47~440Hz
	输入电流 Input Current	115Vac 230Vac 250mA 120mA
	冲击电流 Inrush Current	115Vac 230Vac 20A 40A
	待机功耗 Stand-by Power Consumption	0.3W Max
	外接保险管推荐值 Recommended External Input Fuse	3.15A/250V 慢断(Time lag)
	热插拔 Hot Plug	不支持(Unavailable)
	输出电压精度 Output Voltage Accuracy	±2.5%
	线性调节率 Line Regulation	±0.5%
输出 Output	负载调节率 Load Regulation	±1%
	温度漂移系数 Temperature Drift Factor	±0.05%/°C (0~85°C)
	最小负载 Min. Load	0
	满载开机上升时间 Set-Up Time At Full Load	1000ms,20ms/230Vac 1000ms,20ms/115Vac
	满载掉电保持时间(典型值) Hold-up Time At Full Load	40ms/230Vac 10ms/115Vac
	过流保护 Over-Current Protection	≥115%Io 自恢复 Self-recovery
	短路保护 Short Circuit Protection	打隔式, 可长期短路, 自恢复 Hiccup, Continuous short capable, Self-recovery
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to derating curve)
	工作环境湿度 Ambient Humidity	20~90% RH (无冷凝 No Condensing) at full load
	存储温度 Storage Temperature	- 40°C ~ +85°C
	存储湿度 Storage Humidity	10%~95%
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output ≥3000Vac 5mA 60S
	设计参考标准 Reference Safety Standards	UL/CUL60950 IEC/EN60950
	内置 EMI Built-in EMI filter	传导骚扰 CE Meet CISPR22/EN55022 , CLASS B 辐射骚扰 RE Meet CISPR22/EN55022, CLASS B
	MTBF(MIL-HDBK-217F)	970Khrs Min @230VAC input 25°C
可靠性 Reliability Requirement	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature

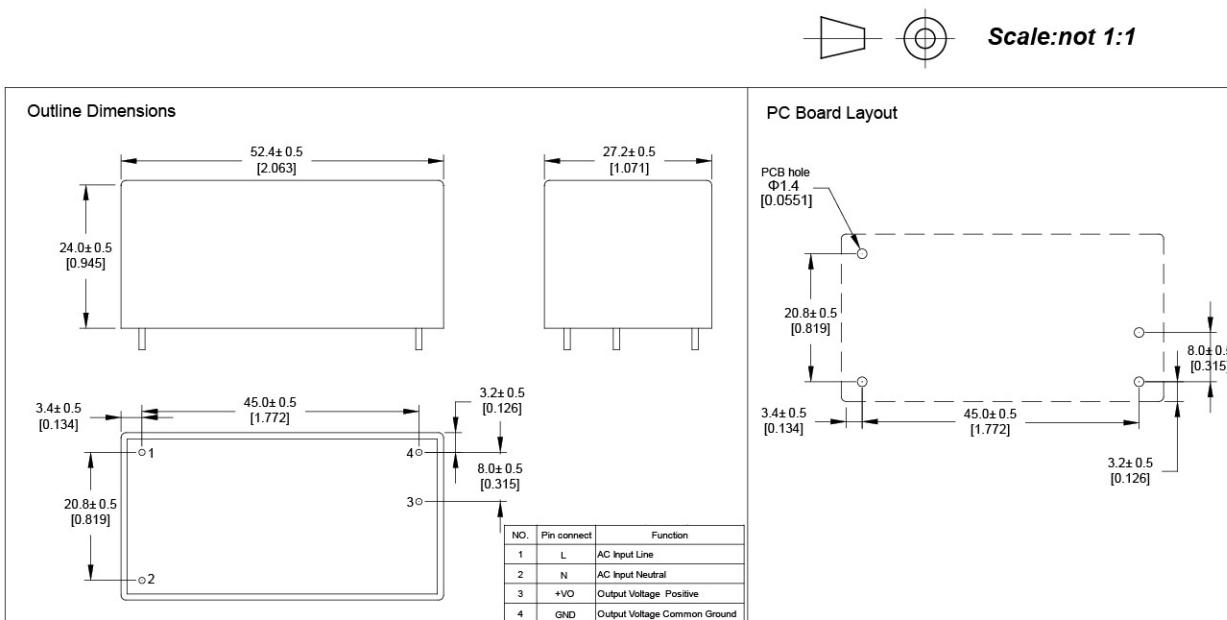
产品特性曲线 PRODUCT CHARACTERISTIC CURVE



典型应用电路 TYPICAL APPLICATION SCHEMATIC



尺寸图 MECHANICAL SPECIFICATION



ZP20 STANDARD SERIES:[20W]



FEATURES

- PCB mounted switching power module
- AC input voltage range: 85VAC ~ 265VAC
- DC input voltage range: 100VDC ~ 370VDC
- Ambient temperature range: - 25°C ~ 85°C
(Refer to derating curve)
- Storage temperature range: - 40°C ~ 105°C
- Leakage current(input:265VAC): <0.25mA
- Isolation voltage: Input-Output ≥3000Vac 60S
- Insulation Resistance:Input-Output 500VDC ≥100M Ohms
- MTBF(at 25°C 70%RH environment): >970000hrs
- Compact size, easy installation
- High efficiency, low standby power consumption, environmental-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55022 Class B standard
- Insulation: Class II

产品特点

- 可用在PCB上插装的电源模块
- 交流输入电压范围: 85VAC ~ 265VAC
- 直流输入电压范围: 100VDC ~ 370VDC
- 工作环境温度范围: - 25°C ~ 85°C
(Refer to derating curve)
- 储存温度范围: - 40°C ~ 105°C
- 漏电流(输入电压:265VAC): <0.25mA
- 绝缘电压: 输入-输出 ≥3000Vac 60S
- 绝缘电阻: 输入-输出 500VDC ≥100M Ohms
- 寿命(常温常湿): >970000hrs
- 体积小, 便于安装
- 高效率, 低待机功耗, 绿色环保
- 内置输出过流保护, 过压保护, 短路保护功能
- 内置EMI滤波元器件, 裸机可以满足EN55022 Class B
- 安全等级: Class II

应用 APPLICATIONS

该系列产品在LED、灯光控制、仪表、通讯、智能家具及民用等多个领域都有重要的应用。

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

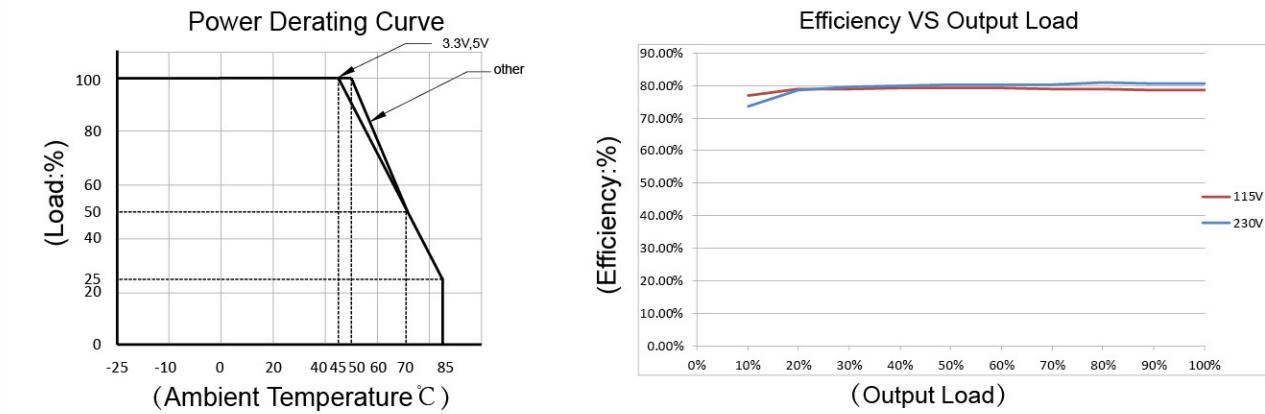
型号列表 MODEL LIST

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple& Noise(max)	Ambient TEMP(°C)	Weight
ZP20S0300WL	14.85W	3.3Vdc	4.5A	75%	200mVp-p	50	59g
ZP20S0500WL	20W	5Vdc	4A	77%	200mVp-p	50	59g
ZP20S1200WL	20W	12Vdc	1.8A	83%	200mVp-p	50	59g
ZP20S1500WL	20W	15Vdc	1.4A	83%	200mVp-p	50	59g
ZP20S2400WL	20W	24Vdc	0.9A	84%	200mVp-p	50	59g

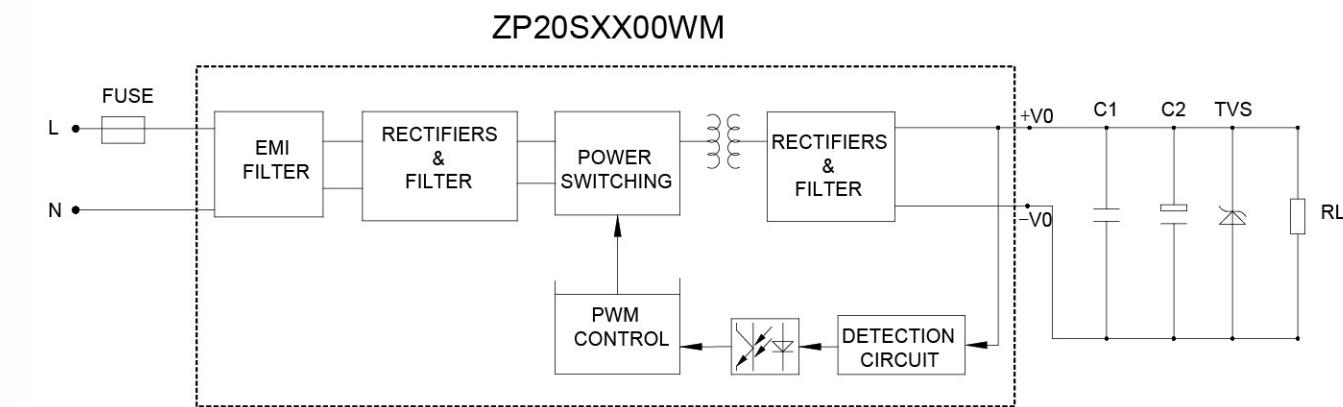
电性能 **ELECTRONIC SPECIFICATION**

项目 Item		规格 Specification	
输入 Input	输入电压范围 Input Voltage Range	85~265Vac or 100~370Vdc	
	输入频率范围 AC Input Frequency Range	47~440Hz	
	输入电流 Input Current	115Vac	230Vac
		300mA	150mA
	冲击电流 Inrush Current	115Vac	230Vac
		20A	40A
	待机功耗 Stand-by Power Consumption	0.3W Max	
	外接保险管推荐值 Recommended External Input Fuse	3.15A/250V 慢断(Time lag)	
输出 Output	热插拔 Hot Plug	不支持(Unavailable)	
	输出电压精度 Output Voltage Accuracy	$\pm 2.5\%$	
	线性调节率 Line Regulation	$\pm 0.5\%$	
	负载调节率 Load Regulation	$\pm 1\%$	
	温度漂移系数 Temperature Drift Factor	$\pm 0.05\%/\text{°C}$ (0~85°C)	
	最小负载 Min. Load	0	
	满载开机上升时间 Set-Up Time At Full Load	1000ms,20ms/230Vac 1000ms,20ms/115Vac	
	满载掉电保持时间(典型值) Hold-up Time At Full Load	40ms/230Vac 8ms/115Vac	
保护特性 Protection Characteristics	过流保护 Over-Current Protection	$\geq 115\%I_{o}$ 自恢复 Self-recovery	
	短路保护 Short Circuit Protection	打隔式,可长期短路,自恢复 Hiccup,Continuous short capable,Self-recovery	
环境 Ambient	工作环境温度 Ambient Temperature	- 25°C ~ 85°C (Refer to Derating Curve)	
	工作环境湿度 Ambient Humidity	20~90% RH (无冷凝 No Condensing) at full load	
	存储温度 Storage Temperature	- 40°C ~ +85°C	
	存储湿度 Storage Humidity	10%~95%	
安全&EMC Safety&EMC requirement	绝缘强度 Dielectric Strength	Input-Output $\geq 3000\text{Vac}$ 5mA 60S	
	设计参考标准 Reference Safety Standards	UL/CUL60950 IEC/EN60950	
	内置 EMI Built-in EMI filter	传导骚扰 CE Meet CISPR22/EN55022 , CLASS B	辐射骚扰 RE Meet CISPR22/EN55022, CLASS B
可靠性 Reliability Requirement	MTBF(MIL-HDBK-217F)	970Khrs Min @230VAC input 25°C	
	老化测试 Burn-In Test	输入 264Vac ,常温满载老化 2~5 小时 The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature	

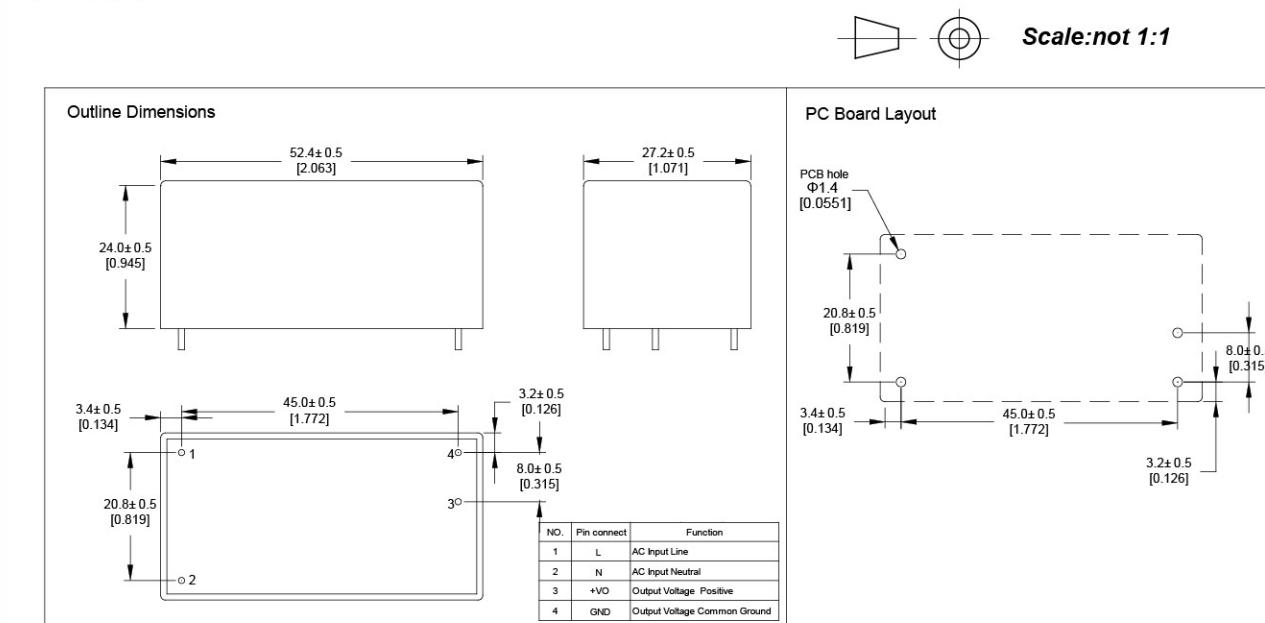
产品特性曲线 **PRODUCT CHARACTERISTIC CURVE**



典型应用电路 **TYPICAL APPLICATION SCHEMATIC**



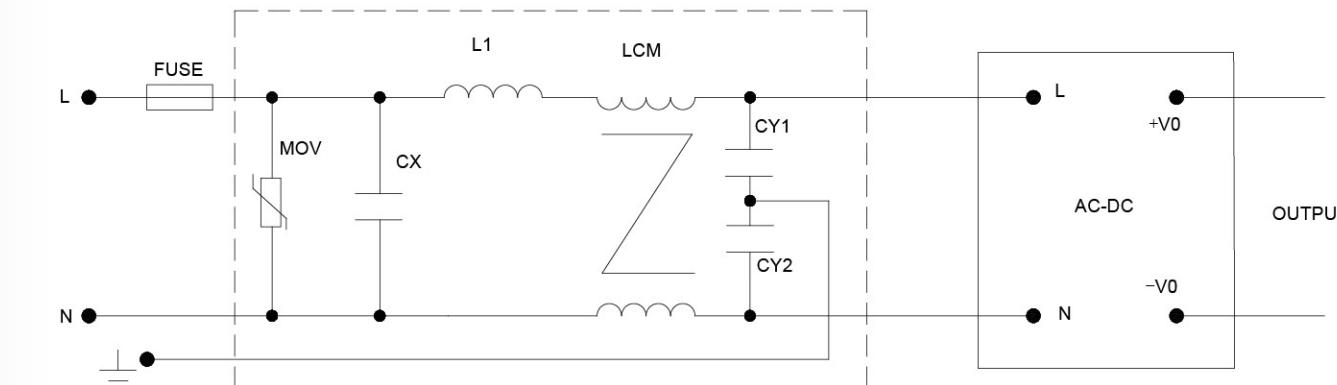
尺寸图 **MECHANICAL SPECIFICATION**



► 外观尺寸及功率推荐表 **ZETTLER OUTLINE DIMENSION DATA**

Case Type	Dimension	Power Capability	ZETTLER SERIES
	L X W X H(mm)		
TYPE A	45.2 X 30.2 X 23.85	5-10w	ZP05 ZP10
TYPE B	32.1 X 27.1 X 19.3	3-5w	ZP03 ZP05
TYPE D	55.2 X 35.2 X 25.5	10-20w	ZP10
TYPE E	23.9 X 23.0 X 18.0	0-3w	ZP01 ZP03
TYPE F	27.94 X 23.24 X 13.97	0-2w	BP01
TYPE H	25.4 X 25.4 X 15.24	3-5w	ZP03 ZP05
TYPE I	33.7 X 22.2 X 15	0-2w	HP01
TYPE J	37.0 X 24.0 X 15	2-3w	HP02 HP03
TYPE K	55.0 X 45.0 X 20.0	8-20w	ZP15
TYPE L	52.4X27.2X24.0	10-20w	ZP15 ZP20

► EMC解决方案——推荐电路 **EMC SOLUTION-RECOMENDED CIRCUIT**



ITEM	MOV	CX	L1	LCM	CY1、CY2	FUSE
1~2W	14D561K	0.1uF/275VAC	1mH/0.5A	10mH~30mH	1nF/400VAC	1A/250V
3~10W	14D561K	0.1uF/275VAC	1mH/ 1A	10mH~30mH	1nF/400VAC	2A/250V
10~20W	14D561K	0.1uF/275VAC	1mH/ 1A	10mH~30mH	1nF/400VAC	3.15A/250V

► EMC特性 **EMC SPECIFICATIONS**

项目 Item	标准 Standard
EMI	传导骚扰 CE CISPR22/EN55022, CLASS B
	辐射骚扰 RE CISPR22/EN55022, CLASS B
EMS	静电放电 ESD IEC/EN61000-4-2 Contact ±6 kV / Air ±8 kV Perf. Criteria A
	辐射抗扰度 RS IEC/EN61000-4-3 10V/m Perf. Criteria A
脉冲群抗扰度 EFT	IEC/EN61000-4-4 ±1KV perf. Criteria A
	IEC/EN61000-4-4 ±4KV perf. Criteria B
浪涌抗扰度 Surge	IEC/EN61000-4-5 L-N : ±1KV perf. Criteria A
	IEC/EN61000-4-5 ±2KV/4KV perf. Criteria B
传导骚扰抗扰度 CS	IEC/EN61000-4-6 10 V _{r.m.s} perf. Criteria A
工频磁场抗扰度 PFM	IEC/EN61000-4-8 10A/m perf. Criteria A
电压暂降、跌落和短时中断抗扰度 Voltage dips, short interruptions and voltage variations immunity	IEC/EN61000-4-11 0%-70% perf. Criteria A

► 托盘包装规格 **TRAY PACKAGING**

Part No.	Tray Size L x W x H(mm)	Qty (Per Tray)	Weight(kg) (Per Tray)	Carton Outline L x W x H(mm)	QTY (Per Carton)	Weight(kg) (Per Carton)
HP01SXXXXWI	480X36.5X23	20	0.46	550X180X125	420	10
HP02SXXXXWJ	480X27X23	12	0.32	550X180X125	288	8
HP03SXXXXWJ	480X27X23	12	0.32	550X180X125	288	8
BP01SXXXXW	325X225X45	104	1.92	355X245X120	208	3.94
ZP01SXXXXWE	325X225X45	117	1.86	355X245X120	234	3.82
ZP02SXXXXWF	325X225X45	104	1.98	355X245X120	208	4.06
ZP03SXXXXWE	325X225X45	117	1.86	355X245X120	234	3.82
ZP03SXXXXWH	325X225X45	96	2.5	355X245X120	192	5.1
ZP05SXXXXWH	325X225X45	96	2.5	355X245X120	192	5.1
ZP05SXXXXWB	325X225X45	72	2.26	355X245X120	144	4.62
ZP05SXXXXW	325X225X45	42	2.2	355X245X120	84	4.5
ZP05DXXXXW	325X225X45	42	2.2	355X245X120	84	4.5
ZP10SXXXXWA	325X225X46	42	2.2	355X245X121	84	4.5
ZP10SXXXXW	325X225X45	30	2.2	355X245X120	60	4.5
ZP15SXXXXWL	325X225X45	44	2.6	355X245X120	88	5.3
ZP20SXXXXWL	325X225X45	44	2.6	355X245X120	88	5.3

产品客制能力

- 让赛特勒经验丰富的工程师们为您的下一个应用项目量身打造一款专属的变压器吧！
Let our highly experienced design engineers assist you in designing a transformer that is custom tailored to fit your next project application!
- 赛特勒在变压器行业已有多年的沉淀，因此我们的工程师团队具备丰富的设计经验和专业的设计能力去为客户特定的变压器应用寻找到合适的产品解决方案。不论是对您标准产品的简单改进，还是为您的电气产品应用提供一个完全定制化的变压器产品，我们的工程师们皆可快速而精准地满足您的要求。
Zettler Magnetics, Inc. has many years of transformer experience. As a result, our engineering staff has the expertise it takes to find solutions to our customers' specialized transformer applications. Whether you need to slightly alter one of your standard products or completely custom design a transformer to support your electrical demands, our engineers are ready to provide the answers to your custom transformer requirements.
- 我们可以提供的客户订制产品种类繁多，下图所列的四个品种只是它们中的一部分。如您在其中没有找到合适的产品，敬请联系我们，让我们了解您的需求。
As Zettler Magnetics, Inc, we offer many different styles of custom designs. Only a few of the custom types that we produce are listed in the following categorie. If you don't see a style below that fits your application, contact us directly to discuss your special transformer needs.

定制电源变压器 CUSTOM POWER TRANSFORMS

单个或者单相，低功率到高功率，频率50/60, 400Hz根据客户规格要求定制设计。
Custom designed power transformers for one or single phase, low to high power, frequencies of 50/60 and 400Hz based on customer specifications.

开关电源变压器 SWITCH MODE TRANSFORMS

适用于变频逆变器、电脑、通讯、开关电源、EL驱动模块等
Suitable for converter inverters, computers, telecommunications, switching power supplies, EL driver modules, etc.



赛特勒集团

经历了一个多世纪的德国精密工程技术和工艺的传承，如今赛特勒已成为一个专门从事电子元器件设计、制造和销售的世界级企业。卓越的工程开发能力与广泛的全球业务网络的独特结合是我们成为行业领导者的保证。

赛特勒集团拥有的多元化产品线能针对各种客户需求提供元器件应用方面的完整解决方案。目前产品分如下四大系列：

- 继电器
- 变压器
- LCD/TFT 显示模组
- 暖通空调及制冷控制元器件/温控器
- 新能源解决方案

通过在世界多个工业化地区建立全球运营网络，我们不仅具有成本的优势，而且有能力为以下区域所服务的工业和民用领域客户提供快捷的定制化产品解决方案：

- 美国
- 中国和东南亚
- 欧洲

Building on a foundation of more than a century of expertise in German precision engineering, ZETTLER GROUP is a world-class enterprise, engaged in the design, manufacturing, sales and distribution of Electronic Components. Our industry leadership is based on an unique combination of Engineering Competence and Global Scale.

ZETTLER GROUP's diversified product lines are designed to provide complete solutions for component applications across a broad spectrum of industries:

- Electromechanical Relays
- Transformers/Magnetics
- LCD/TFT Displays
- HVAC/R Control Components and Thermostats
- New Energy Solutions

With a global network of operating companies established across many parts of the industrialized world, we are not only present in low cost manufacturing geographies, but also have the ability to provide customer focused solutions in local proximity to the industrial and commercial markets we serve:

- North America
- China and South East Asia
- Europe



欧洲
Europe



中国和东南亚
China and South East Asia



美国
North America