



### ORDERING CODE (命名规则)

Example:

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 ( $\geq 165\text{VAC}$ )

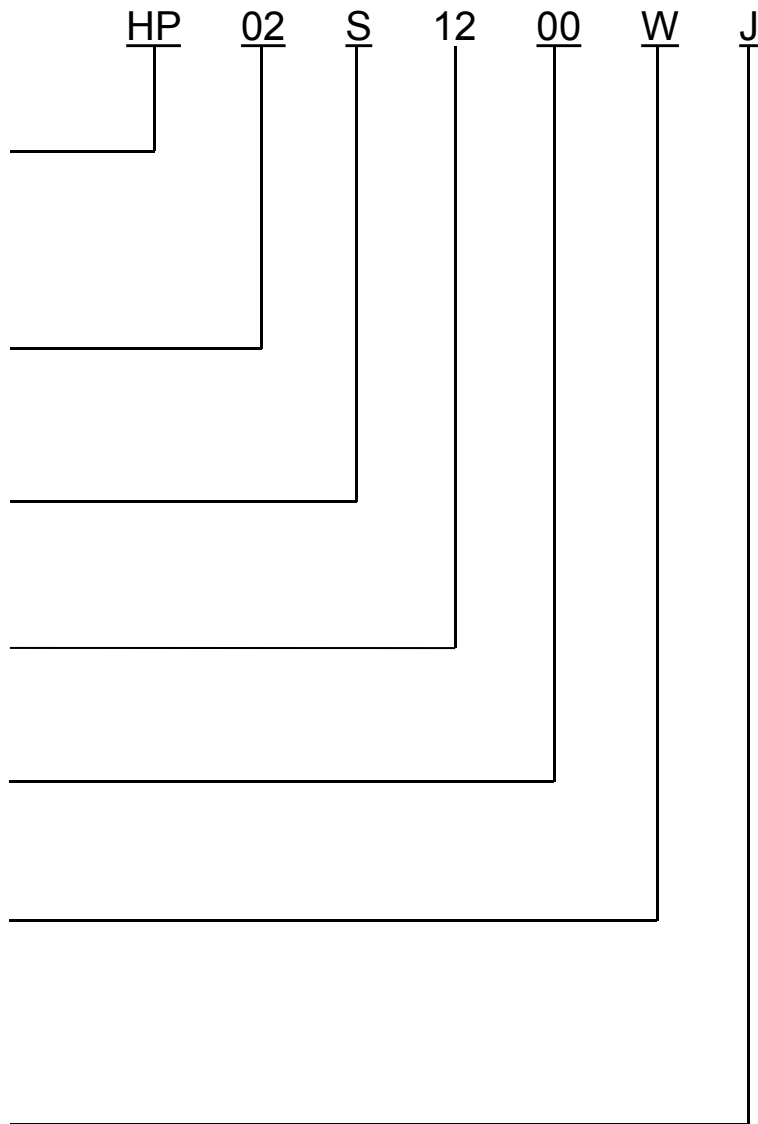
L=Low Voltage Input ( $< 165\text{VAC}$ )

Additional Case Type

Example

A: A Type case

B: B Type case...



### FEATURES (产品特点)

- PCB mounted switching Power module
- AC input voltage range: 85VAC~305VAC
- DC input voltage range: 100VDC~430VDC
- Ambient temperature range:-25℃~85℃
- Storage temperature range:-40℃~105℃
- Leakage current (Input :305VAC):<0.25mA
- Isolation voltage: Input –Output≥3000VAC 60S
- Insulation Resistance: Input –Output 500VDC≥100M Ohms
- MTBF(at 25℃ 70%RH environment):>1000000hrs
- Compact size, easy installation
- High efficiency low standby power consumption<0.15W, 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.

NOTE: Contact Zettler for information on halogen free options

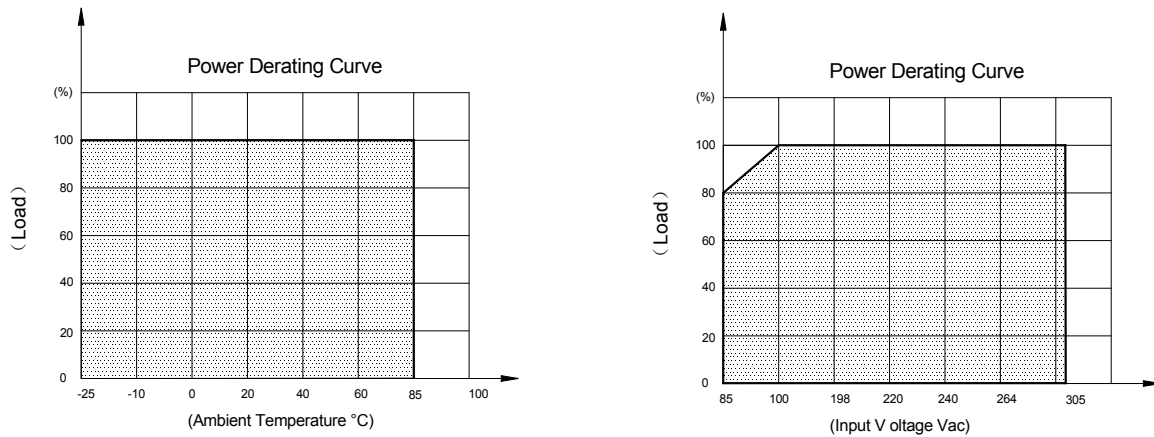
### MODEL LIST (型号列表)

Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise (max)	Ambient TEMP(℃)	Weight	Certificate	
								UL	TUV
HP02S0300WJ	2W	3.3Vdc	600mA	66%	100mVp-p	85	23.1g		
HP02S0500WJ	2W	5 Vdc	400mA	70%	100mVp-p	85	23.1g	●	●
HP02S0600WJ	2W	6 Vdc	333mA	70%	100mVp-p	85	23.1g	●	●
HP02S0700WJ	2W	7.5Vdc	277mA	72%	100mVp-p	85	23.1g	●	●
HP02S0800WJ	2W	8Vdc	250mA	72%	100mVp-p	85	23.1g	●	●
HP02S900WJ	2W	9Vdc	222mA	72%	100mVp-p	85	23.1g	●	●
HP02S1000WJ	2W	10Vdc	200mA	72%	150mVp-p	85	23.1g	●	●
HP02S1200WJ	2W	12Vdc	167mA	74%	150mVp-p	85	23.1g	●	●
HP02S1500WJ	2W	15Vdc	133mA	75%	200mVp-p	85	23.1g	●	●
HP02S1800WJ	2W	18Vdc	111mA	75%	200mVp-p	85	23.1g	●	●
HP02S2400WJ	2W	24Vdc	83mA	77%	200mVp-p	85	23.1g	●	●

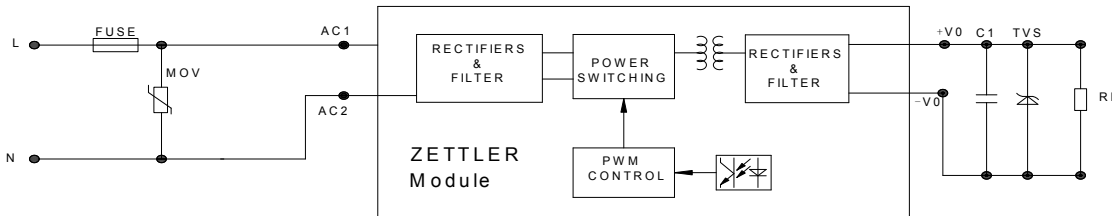
### ELECTRICAL SPECIFICATION (电性能参数)

Model No. / 型号		HP02SXX00WJ		
Input 输入参数	Rate Voltage / 额定电压	100~277VAC		
	Input Voltage Range / 输入电压范围	85~305VAC or 100~430VDC		
	Frequency (Hz) / 输入频率范围	47-63 Hz		
	Current (Full load) / 输入电流	115VAC	230VAC	277VAC
		70mA	40mA	35mA
	Inrush Current (<500us) / 冲击电流	10A	20A	
	No Load Loss / 待机功耗	0.15W 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	(3.3V/5V±5%) ±3%		
	Line Regulation / 线性调节率	±0.5%		
	Load Regulation / 负载调节率	±0.5%		
	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	≤50ms/230Vac, ≤30ms/115Vac		
Hold up Time / 掉电保持时间(典型值)	>40ms/230VAC, 12ms/115VAC			
Protection 保护特性	Over Current Protection / 过流保护	≥120%Io 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...+85°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	±0.03%/°C (0~85°C)		
Physical 外观结构	Case Material / 外壳材质	Plastic (UL 94V-0 rated)		
	Weight / 产品净重	23.1g (ref.)		
Safety & EMC 安全认证及 电磁兼容	Dielectric Strength / 绝缘强度	≥3000V/50HZ 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		
	EMS (Noise Immunity)/ 电磁抗干扰	EN61000-3-2 Class A Heavy industry level (surge L-N:1KV)	Need to add external EMC component (See the Schematic)	
Reliability Requirement 可靠性要求	MTBF/平均故障间隔时间	1000Khrs 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	FUSE
1~2W	14D561K	1A/300V
3~10W	14D561K	2A/300V
10~20W	14D561K	3.15A/300V

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)

