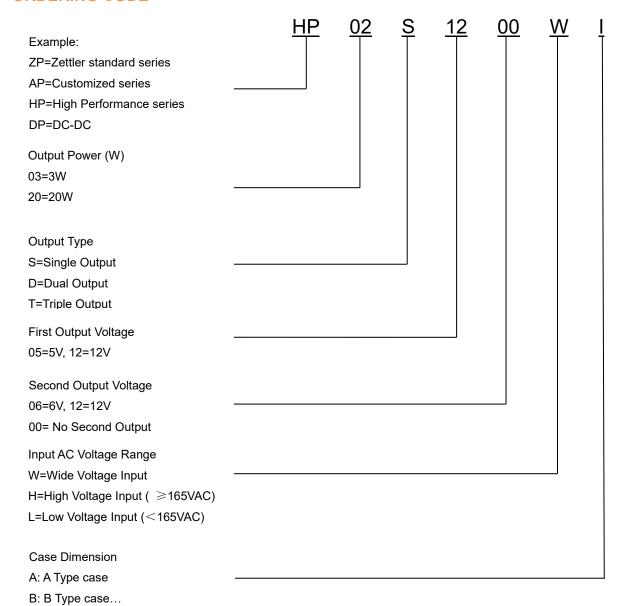






### **ORDERING CODE**



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### **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≥3600VAC 60S

• Insulation Resistance: Input –Output 500VDC≥100M Ohms

● MTBF: 1000Khrs Min MIL-HDBK-217F (25°C)

• 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

• Class II Construction

### **APPLICATIONS**

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**

| Model No.   | Output | DC<br>Voltage | Rated<br>Current | Efficiency 230VAC, | Ripple & Noise | Ambient TEMP( $^{\circ}$ C) | Weight | Certificate |     |    |    |
|-------------|--------|---------------|------------------|--------------------|----------------|-----------------------------|--------|-------------|-----|----|----|
|             | Power  |               |                  | % Тур.             | (max)          |                             |        | UL          | TUV | CE | СВ |
| HP02S0300WI | 2W     | 3.3Vdc        | 600mA            | 66%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S0500WI | 2W     | 5 Vdc         | 400mA            | 70%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S0600WI | 2W     | 6 Vdc         | 333mA            | 70%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S0700WI | 2W     | 7.5Vdc        | 266mA            | 72%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S0800WI | 2W     | 8Vdc          | 250mA            | 72%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S0900WI | 2W     | 9Vdc          | 222mA            | 72%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S1000WI | 2W     | 10Vdc         | 200mA            | 72%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S1200WI | 2W     | 12Vdc         | 167mA            | 74%                | 150mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S1500WI | 2W     | 15Vdc         | 133mA            | 75%                | 200mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S1800WI | 2W     | 18Vdc         | 111mA            | 75%                | 200mVp-p       | 85                          | 20g    | •           | •   | •  | •  |
| HP02S2400WI | 2W     | 24Vdc         | 83mA             | 77%                | 200mVp-p       | 85                          | 20g    | •           | •   | •  | •  |

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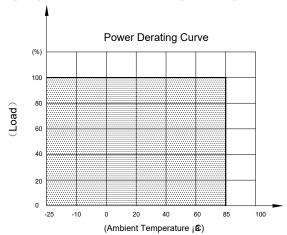
# **ELECTRICAL SPECIFICATION**

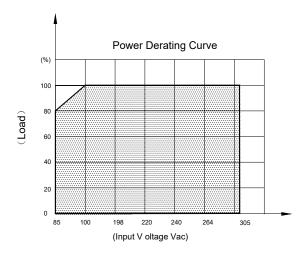
| Model No.     |                          | HP02SXX00WI  |   |  |  |  |  |
|---------------|--------------------------|--|---|--|--|--|--|
| Rated Voltage |                          | 100~277VAC   |   |  |  |  |  |
| Input         | Voltage Range            | 85~305VAC or 100~430VDC  |   |  |  |  |  |
|               | Frequency (Hz)           | 47-63 Hz   |   |  |  |  |  |
|               |                          | 115VAC   | 230VAC  |  |  |  |  |
|               | Current (Full load)      | 45mA   | 30mA  |  |  |  |  |
|               | Inrush Current (<500us)  | 6A   | 10A   |  |  |  |  |
|               | No Load Loss             | 0.15W Max@230VAC   |   |  |  |  |  |
|               | HOT PLUG                 | Unavailable  |   |  |  |  |  |
| Output        | Voltage (V)              | Refer to "Model List"  |   |  |  |  |  |
|               | Current (mA) max.        | Refer to "Model List"  |   |  |  |  |  |
|               | Voltage Accuracy         | ±3%  |   |  |  |  |  |
|               | Line Regulation          | ±0.5%  |   |  |  |  |  |
|               | Load Regulation          | ±0.5%  |   |  |  |  |  |
|               | Minimum Load (mA)        | 0  |   |  |  |  |  |
|               | Ripple & Noise           | Refer to "Model List"  |   |  |  |  |  |
|               | Efficiency (typ.)        | Refer to "Model List"  |   |  |  |  |  |
|               | Set-up Time              | ≤50ms/230Vac,≤30ms/115Vac  |   |  |  |  |  |
|               | Hold up Time             | >40ms/230VAC,12ms/115VAC   |   |  |  |  |  |
| Protection    | Over Current Protection  | ≥120%lo Self-recovery  |   |  |  |  |  |
|               | Short Circuit Protection | Hiccup ,continuous ,short capable, self-recovery   |   |  |  |  |  |
| Environment   | Operating Temperature    | -25°C+85°C @Free air convection  |   |  |  |  |  |
|               | Operating Humidity       | 10-90% RH  |   |  |  |  |  |
|               | Storage Temperature      | -40°C+105°C  |   |  |  |  |  |
|               | Storage Humidity         | 5~95% RH ( No Condensing) at full load   |   |  |  |  |  |
|               | Temperature Coefficient  | ±0.03%/°C (0~85°C)   |   |  |  |  |  |
| Physical      | Case Material            | Plastic (UL 94V-0 rated)   |   |  |  |  |  |
|               | Weight                   | 20g (ref.)   |   |  |  |  |  |
|               | Dielectric Strength      | I/P-O/P : 3600VAC  |   |  |  |  |  |
| Safety &      | Safety Standards         | Compliance With UL/EN62368-1 ,EN61558-2-16   |   |  |  |  |  |
| EMC           | EMI                      | Compliance With EN55032, CLASS B EN61000-3-2, EN61000-3-3                                  |   |  |  |  |  |
|               | EMS (Noise Immunity)     | Compliance With EN55035  | Need to add external EMC component (Refer to the Schematic) |  |  |  |  |
| Reliability   | MTBF                     | 1000Khrs Min MIL-HDBK-217F(25°C)   |   |  |  |  |  |
| Requirement   | Burn-In Test             | The unit shall be burned in for 2~4 Hours under 264Vac input and DC with full load at 25°C |   |  |  |  |  |

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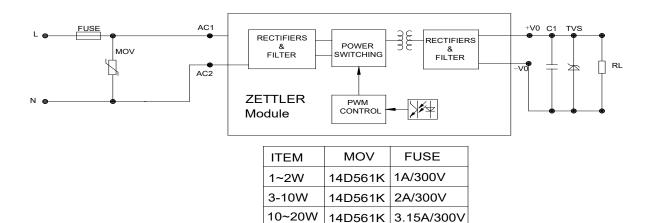
# ZETTLER

## PRODUCT CHARACTERISTIC CURVE



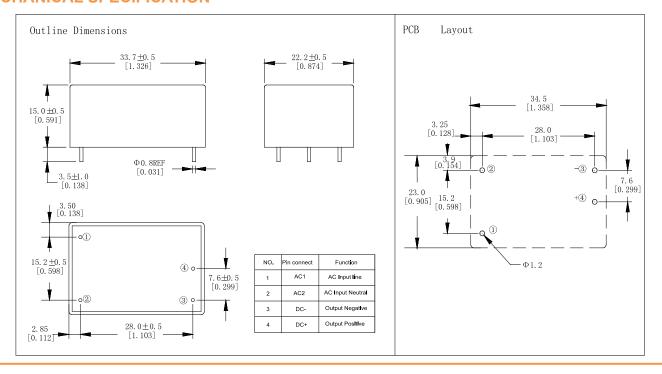


### TYPICAL APPLICATION SCHEMATIC



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

## **MECHANICAL SPECIFICATION**



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