

# Jewinda AC/DC 电源模块

## JWA 金属封装模块系列--25W 三路输出

JWA Metal packaging series power module--25W triple output

### 典型性能 Typical Performance

- ◆ 外形尺寸: 72\*50\*28 (mm)  
Dimension: 72\*50\*28 (mm)
- ◆ 宽电压输入范围  
Wide range input voltage
- ◆ 交直流输入方式  
AC/DC input mode
- ◆ 高效率、高功率密度、低纹波  
High efficiency, High power density, Low ripple & noise
- ◆ 黑金属外壳, 八面屏蔽, 通孔安装  
Black metal shell, Eight face shield, Hole is installed



### 输入特性 Input Features

|                                   |   |                  |
|-----------------------------------|---|------------------|
| 输入电压范围<br>Input voltage range     | W:85~265VAC 120~370VDC<br>N:165~265VAC 230~370VDC | 110VAC<br>220VAC |
| 输入电压频率<br>Input voltage frequency |   | 47~63Hz          |
| 输入冲击电流<br>Inrush current          | 230VAC 冷启动<br>230VAC Cold start,                  | ≤ 20A            |

### 输出特性 Output Features

|                                      |  |   |
|--------------------------------------|--|---|
| 输出电压精度<br>Voltage tolerance          | 标称电压<br>Nominal voltage  | ±1% (3.3V、5V ±2%)   |
| 电压调整率<br>Line regulation (full load) | 输入电压从低端到高端变化<br>Change of input voltage from lowend to highend | $V_{O1} \leq \pm 0.5\%$ $V_{O2}$ 、 $V_{O3} \leq \pm 1.5\%$              |
| 负载调整率<br>Load regul                  | 20%~100%负载变化<br>20%~100% Load change                           | $V_{O1} \leq \pm 0.5\%$ 、 $V_{O2} \leq \pm 3\%$ 、 $V_{O3} \leq \pm 5\%$ |
| 纹波噪声<br>Ripple&Noise                 | 20M 带宽<br>20M Bandwidth  | ≤ 1%  |
| 温度系数<br>Temperature coefficient      |  | ±0.02%/°C   |
| 容性负载<br>Capacitive load              | 输入标称电压、满载<br>Input rated voltage、Full load                     | 见附表<br>As per list enclosed   |
| 过功率保护<br>Output overpower Protection |  | 115~150%额定电流, 自恢复<br>115~150%rated outputpower, auto recovery           |
| 短路保护<br>Short Circuit Protection     |  | 长期, 自恢复<br>Long-term, auto recovery                                     |
| 效率<br>Efficiency                     | 输入标称电压、满载<br>Input rated voltage、 Full load                    | 76% (典型值)<br>76%(typical)   |
| 启动时间<br>Rise time                    | 220VAC 满载<br>220VAC Full load                                  | 50mS (典型值)<br>50ms (typical)  |
| 保持时间<br>Hold up time                 | 220VAC 满载<br>220VAC Full load                                  | 20mS (典型值)<br>50ms (typical)  |

### 一般特性 General Features

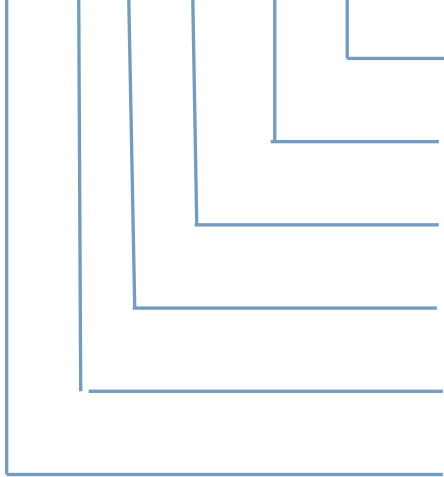
|                               |  |   |
|-------------------------------|--|---|
| 隔离耐压<br>Withstand voltage     | 输入对输出、输入对地<br>I/P-O/P、I/P-F/G<br>输出对地<br>O/P -F/G<br>输出对输出 (隔离)<br>O/P-O/P<br>(1分钟, 漏电流 ≤ 5mA)<br>(1Mintute ,leakage current) ≤ 5mA) | 2500VAC<br><br>500VAC<br><br>500VDC                 |
| 绝缘电阻<br>Isolation resistance  | 500V   | ≥ 100MΩ   |
| MTBF                          | 环境 25°C<br>Environment 25°C  | 2.0*10 <sup>5</sup> Hrs                             |
| 工作温度<br>Operating temperature | 55°C 以上降额使用<br>Above 55°C derating make  | -25°C~70°C 或 -40°C~70°C<br>-25°C~70°C or -40°C~70°C |
| 储存温度<br>Storage temperature   |  | -40°C~85°C  |
| 工作相对湿度<br>Operating humidity  | 无凝露及结冰现象<br>(non condensing)   | 10%~90%RH   |
| 储存相对湿度<br>Storage humidity    | 无凝露及结冰现象<br>(non condensing)   | 5%~95%RH  |
| 冷却方式<br>Cooling method        |  | 自然冷却<br>Convection                                  |

## 容性负载 Capacitive Load

| Vout:5V                |                | Vout:12V、15V           |                | Vout:24V               |                |
|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| 推荐值<br>Recommendations | 最大值<br>Maximum | 推荐值<br>Recommendations | 最大值<br>Maximum | 推荐值<br>Recommendations | 最大值<br>Maximum |
| 1000 $\mu$ F           | 4700 $\mu$ F   | 470 $\mu$ F            | 2200 $\mu$ F   | 100 $\mu$ F            | 470 $\mu$ F    |

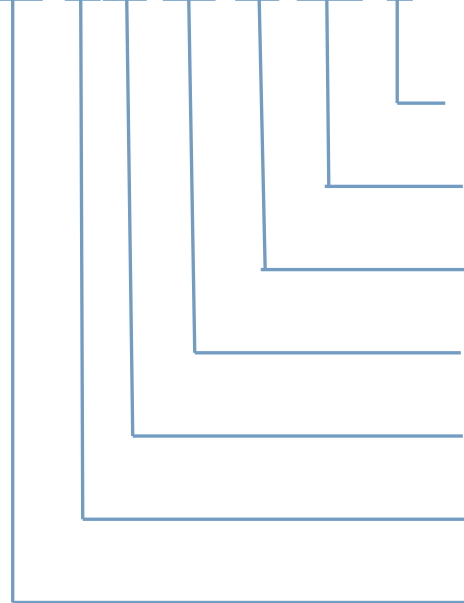
## 命名方式 Naming Rules

### JWA-25 S5 D12 W(N) I



隔离输出  
Isolate output  
输入电压范围 (W:85~265V, N:165~265V)  
Input voltage range (W:85~265V, N:165~265V)  
输出电压  $V_{O2}$ 、 $V_{O3}$  共地输出  
Output voltage  $V_{O2}$ 、 $V_{O3}$  common ground  
输出电压  $V_{O1}$   
Output voltage  $V_{O1}$   
输出功率  
Output power  
AC/DC 金属封装电源模块  
AC/DC Metal packaging power module

### JWA-25 S5 S12 S-5 W(N)I



隔离输出  
Isolate output  
输入电压范围 (W:85~265V, N:165~265V)  
Input voltage range (W:85~265V, N:165~265V)  
输出电压  $V_{O3}$   
Output voltage  $V_{O3}$   
输出电压  $V_{O2}$   
Output voltage  $V_{O2}$   
输出电压  $V_{O1}$   
Output voltage  $V_{O1}$   
输出功率  
Output power  
AC/DC 金属封装电源模块  
AC/DC Metal packaging power module

## 产品选型 Product selection

| 产品型号<br>Model No.   | 输出电压<br>Output voltage<br>$V_O$ | 输出电流<br>Output current<br>$I_O$ | 输出电压精度<br>Output voltage<br>tolerance | 纹波噪声<br>R&N<br>$V_{(P-P)mV}$ | 效率<br>Efficiency |
|---------------------|---------------------------------|---------------------------------|---------------------------------------|------------------------------|------------------|
| JWA-25S5D5W(N)I     | +5V                             | 0.30~3.00A                      | $\pm 2\%$                             | 100mV                        | 74%              |
|                     | +5V                             | 0.10~1.00A                      | $\pm 5\%$                             | 100mV                        |                  |
|                     | -5V                             | 0.10~1.00A                      | $\pm 5\%$                             | 100mV                        |                  |
| JWA-25S5D12W(N)I    | +5V                             | 0.30~3.00A                      | $\pm 2\%$                             | 100mV                        | 76%              |
|                     | +12V                            | 0.04~0.42A                      | $\pm 3\%$                             | 100mV                        |                  |
|                     | -12V                            | 0.04~0.42A                      | $\pm 3\%$                             | 100mV                        |                  |
| JWA-25S5D15W(N)I    | +5V                             | 0.30~3.00A                      | $\pm 2\%$                             | 100mV                        | 77%              |
|                     | +15V                            | 0.03~0.33A                      | $\pm 3\%$                             | 120mV                        |                  |
|                     | -15V                            | 0.03~0.33A                      | $\pm 3\%$                             | 120mV                        |                  |
| JWA-25S5D24W(N)I    | +5V                             | 0.30~3.00A                      | $\pm 2\%$                             | 100mV                        | 79%              |
|                     | +24V                            | 0.02~0.21A                      | $\pm 3\%$                             | 120mV                        |                  |
|                     | -24V                            | 0.02~0.21A                      | $\pm 3\%$                             | 120mV                        |                  |
| JWA-25S12D5W(N)I    | +12V                            | 0.20~1.50A                      | $\pm 1\%$                             | 120mV                        | 75%              |
|                     | +5V                             | 0.06~0.60A                      | $\pm 5\%$                             | 100mV                        |                  |
|                     | -5V                             | 0.06~0.60A                      | $\pm 5\%$                             | 100mV                        |                  |
| JWA-25S24D5W(N)I    | +24V                            | 0.08~0.83A                      | $\pm 1\%$                             | 120mV                        | 77%              |
|                     | +5V                             | 0.05~0.50A                      | $\pm 5\%$                             | 100mV                        |                  |
|                     | -5V                             | 0.05~0.50A                      | $\pm 5\%$                             | 100mV                        |                  |
| JWA-25S24D12W(N)I   | +24V                            | 0.08~0.83A                      | $\pm 1\%$                             | 150mV                        | 79%              |
|                     | +12V                            | 0.02~0.20A                      | $\pm 3\%$                             | 100mV                        |                  |
|                     | -12V                            | 0.02~0.20A                      | $\pm 3\%$                             | 100mV                        |                  |
| JWA-25S5S12S-5W(N)I | +5V                             | 0.30~3.00A                      | $\pm 2\%$                             | 100mV                        | 76%              |
|                     | +12V                            | 0.05~0.50A                      | $\pm 3\%$                             | 120mV                        |                  |
|                     | -5V                             | 0.08~0.80A                      | $\pm 5\%$                             | 80mV                         |                  |

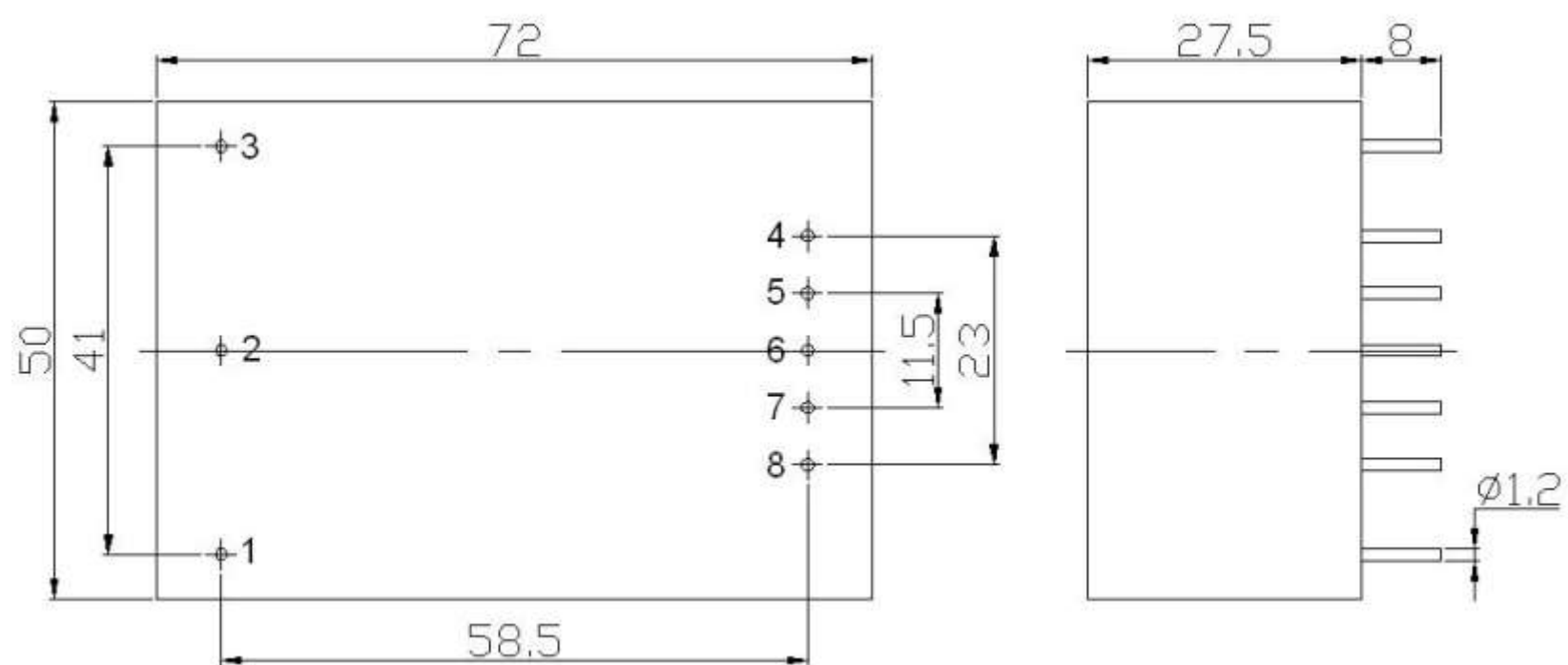
注：因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

Note: Due to space limitations, the above list is only for some products, If other than a list of products, please contact the Company's sales department.

输出纹波噪声（峰-峰值）的测量，请参照模块测试说明中介绍的方法进行。

Output ripple noise measurement (peak - peak), please refer to the module test notes method is introduced.

## 封装尺寸图 Mechanical Data



## 管脚定义 Pin Assignments

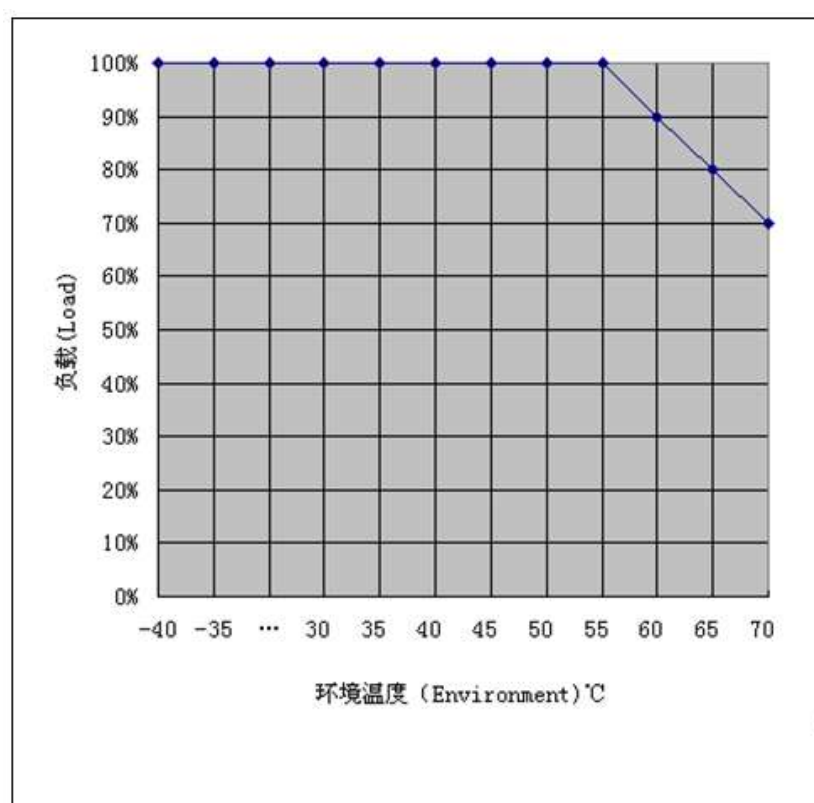
| P1 | P2    | P3    | P4               | P5  | P6               | P7               | P8   |
|----|-------|-------|------------------|-----|------------------|------------------|------|
| FG | AC(L) | AC(N) | V <sub>O2+</sub> | COM | V <sub>O3-</sub> | V <sub>O1+</sub> | GND1 |

注：电源模块的外形尺寸和管脚定义如与选型手册不符，请以实物实际尺寸为准。

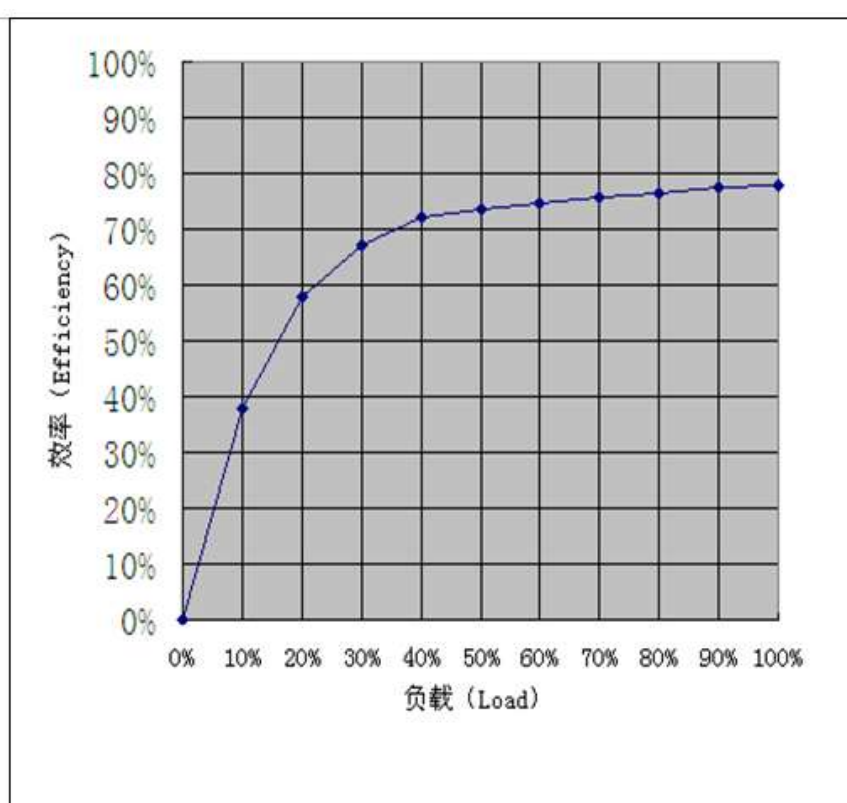
Note: Dimensions and pin definitions of power module such as inconsistent with the hand book, please in kind prevail actual size

## 典型曲线 Typical curve

效率曲线  
Efficiency curve



降额曲线  
Derating curve



## 纹波噪声测试: (靠测法 20MHz)

测试方法：纹波&噪声用示波器来测试。测试模块噪声时为了避免引入额外噪声，须用示波器探头直接接触模块输出引脚

