

Jewinda AC/DC 电源模块

JWA 金属封装模块系列--25W 双路隔离输出

JWA Metal packaging series power module--25W Dual isolate output

典型性能 Typical Performance

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

输出特性 Output Features

| | | |
|--------------------------------------|--|---|
| 输出电压精度 Voltage tolerance | 标称电压 Nominal voltage | $V_{O1} \cong \pm 1\%$ (3.3V、5V $\cong \pm 2\%$) $V_{O2} \cong \pm 3.0\%$ |
| 电压调整率 Line regulation (full load) | 输入电压从低端到高端变化 Change of input voltage from lowend to highend | $V_{O1} \cong \pm 0.5\%$ $V_{O2} \cong \pm 1.5\%$ |
| 负载调整率 Load regul | 20%~100%负载变化 20%~100% Load change | $V_{O1} \cong \pm 0.5\%$ $V_{O2} \cong \pm 3.0\%$ |
| 温度系数 Temperature coefficient | | $\pm 0.02\%/^{\circ}\text{C}$ |
| 容性负载 Capacitive load | 输入标称电压、满载 Input rated voltage, Full load | 见附表 As per list enclosed |
| 过功率保护 Output overpower Protection | | 115~150%额定电流,自恢复 115~150%rated outputpower, auto recovery |
| 短路保护 Short Circuit Protection | | 长期, 自恢复 Long-term,auto recovery |
| 效率 Efficiency | 输入标称电压、满载 Input rated voltage, Full load | 76% (典型值) 76%(typical) |
| 启动时间 Rise time | 220VAC 满载 220VAC Full load | 50mS (典型值) 50ms (typical) |
| 保持时间 Hold up time | 220VAC 满载 220VAC Full load | 20mS (典型值) 50ms (typical) |

一般特性 General Features

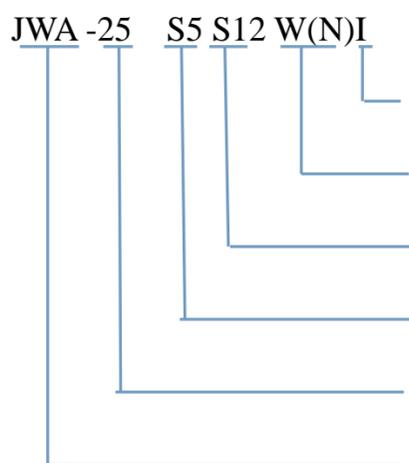
| | | |
|-------------------------------|--|---|
| 隔离耐压 Withstand voltage | 输入对输出、输入对地 I/P-O/P、I/P-F/G 输出对地 O/P -F/G 输出对输出(隔离) O/P-O/P (1分钟,漏电流 $\cong 5\text{mA}$) (1Mintute ,leakage current) $\cong 5\text{mA}$) | 2500VAC 500VAC 500VDC |
| 绝缘电阻 Isolation resistance | 500V | $\cong 100\text{M}\Omega$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

容性负载 Capacitive Load

| Vout:5V | | Vout:12V、15V | | Vout:24V | |
|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| 推荐值 Recommendations | 最大值 Maximum | 推荐值 Recommendations | 最大值 Maximum | 推荐值 Recommendations | 最大值 Maximum |
| 1000μF | 4700μF | 470μF | 2200μF | 100μF | 470μF |

命名方式 Naming Rules

JWA -25 S5 S12 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}
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 Model No. | 输出电压 Output voltage V_O | 输出电流 Output current I_O | 输出电压精度 Output voltage tolerance | 纹波噪声 R&N $V_{(P-P)mV}$ | 效率 Efficiency |
|-------------------|---------------------------------|---------------------------------|---------------------------------------|------------------------------|------------------|
| JWA-25S5S5W(N)I | +5V | 0.40~4.00A | $\pm 2\%$ | 80mV | 76% |
| | +5V | 0.10~1.00A | $\pm 5\%$ | 80mV | |
| JWA-25S5S12W(N)I | +5V | 0.40~4.00A | $\pm 2\%$ | 150mV | 78% |
| | +12V | 0.04~0.42A | $\pm 3\%$ | 80mV | |
| JWA-25S5S15W(N)I | +5V | 0.30~3.00A | $\pm 2\%$ | 80mV | 78% |
| | +15V | 0.06~0.67A | $\pm 3\%$ | 120mV | |
| JWA-25S5S24W(N)I | +5V | 0.40~4.00A | $\pm 2\%$ | 80mV | 79% |
| | +24V | 0.02~0.21A | $\pm 3\%$ | 120mV | |
| JWA-25S12S5W(N)I | +12V | 0.20~1.67A | $\pm 1\%$ | 100mV | 78% |
| | +5V | 0.10~1.00A | $\pm 5\%$ | 80mV | |
| JWA-25S12S12W(N)I | +12V | 0.20~1.50A | $\pm 1\%$ | 100mV | 81% |
| | +12V | 0.05~0.58A | $\pm 3\%$ | 100mV | |
| JWA-25S12S15W(N)I | +12V | 0.20~1.50A | $\pm 1\%$ | 100mV | 81% |
| | +15V | 0.05~0.45A | $\pm 3\%$ | 100mV | |
| JWA-25S12S24W(N)I | +12V | 0.20~1.50 A | $\pm 1\%$ | 100mV | 82% |
| | +24V | 0.03~0.30A | $\pm 3\%$ | 120mV | |

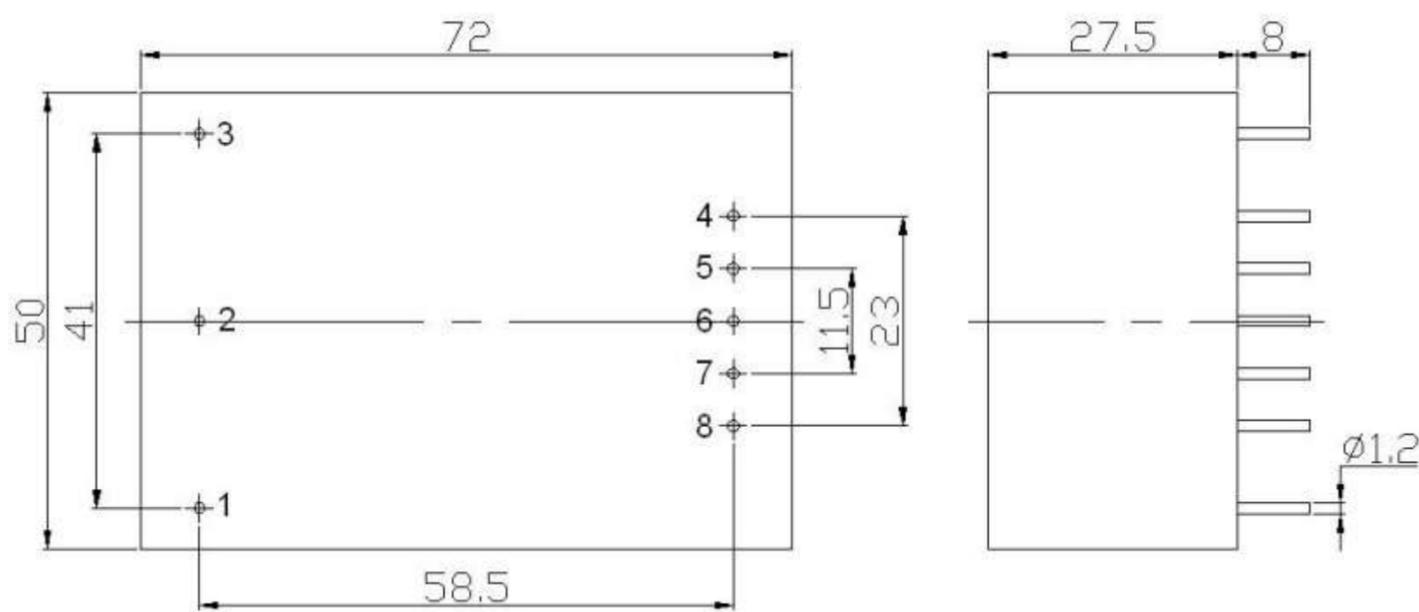
注：因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

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

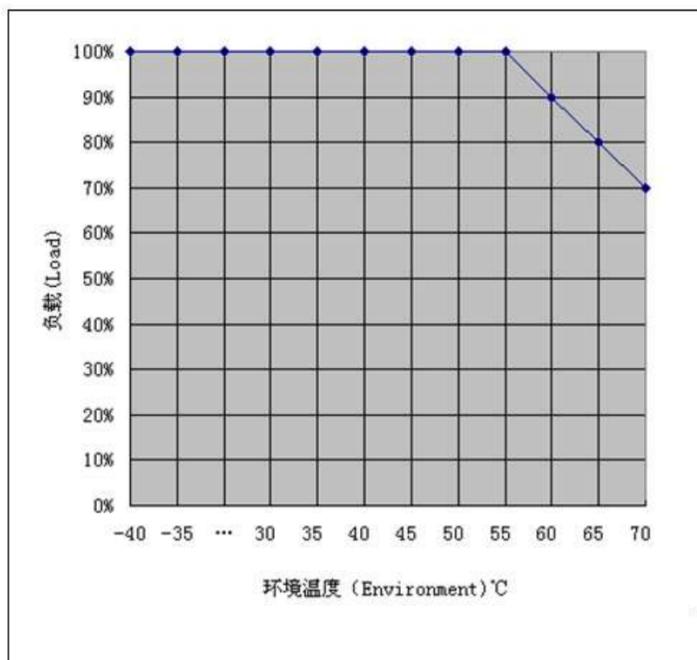
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
|----|-------|-------|-----------|------|----|-----------|------|
| FG | AC(L) | AC(N) | V_{O2+} | GND2 | NP | V_{O1+} | GND1 |

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。

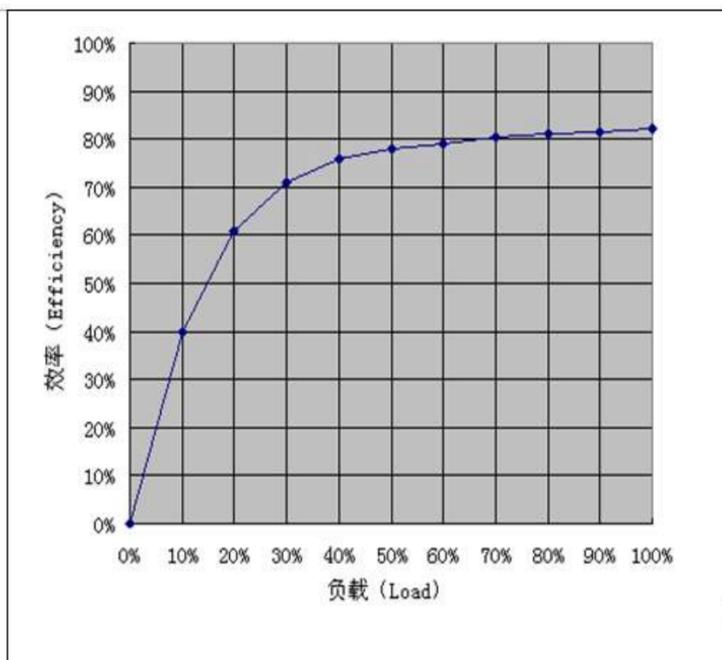
Note: Dimensions and pin definitions of power module such as inconsistent with the hand book, please in kind prevail actual size

典型曲线 Typical curve

降额曲线
Derating curve



效率曲线
Efficiency 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

