

Jewinda DC/DC 新能源高压电源模块

JWDX--10W 新能源高压电源模块双路输出系列

JWDX--10W New energy high input power supply module dual output series

典型性能 Typical Performance

- ◆外形尺寸: 72*50*28 (mm)
Dimension: 72*50*28 (mm)
- ◆宽输入电压范围 (6:1 和 10: 1 输入电压范围)
Wide range input voltage (6: 1 & 10: 1 range input voltage)
- ◆105°C长寿命电解电容
105°C long life electrolytic capacitors
- ◆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
- ◆安规: EN60950
Ann rules: EN60950



输入特性 Input Features

| | | |
|--|--|--------------------------------|
| 输入电压范围 Input voltage range | 标称 700V Nominal voltage 700V 标称 1100V Nominal voltage 24V | 200~1200VDC 200~2000VDC |
| 输入冲击电流 Inrush current | 200V 600V 1200V 2000V | ≦ 7A ≦ 20A ≦ 35A ≦ 50 |
| 输入欠压保护 Input under-voltage protection | 欠压保护点 Under-voltage protection point | 175~185V |

输出特性 Output Features

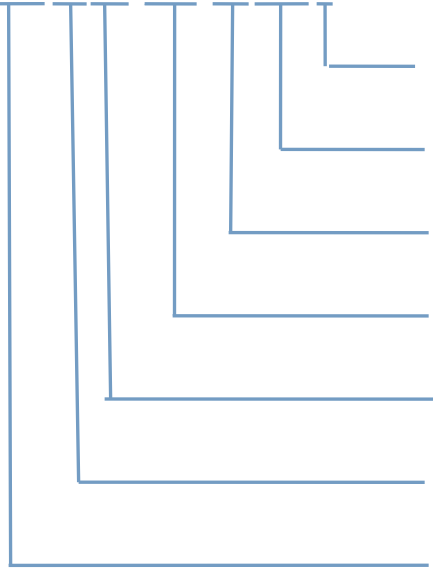
| | | |
|--------------------------------------|--|--|
| 输出电压精度 Voltage tolerance | 标称电压 Nominal voltage | $V_{o1} \leq \pm 1\%$ ($5V \leq \pm 2\%$), $V_{o2} \leq \pm 3\%$ |
| 电压调整率 Line regulation (full load) | 输入电压从低端到高端变化 Change of input voltage from lowend to highend | $V_{o1} \leq \pm 0.5\%$, $v_{o2} \leq \pm 1.5\%$ |
| 负载调整率 Load regul | 20%~100%负载变化 20%~100% Load change | $V_{o1} \leq \pm 0.5\%$, $v_{o2} \leq \pm 3\%$ |
| 温度系数 Temperature coefficient | | $\pm 0.02\%/^{\circ}C$ |
| 过功率保护 Output overload Protection | | 115~150%额定电流, 自恢复 115~150% rated output power, auto recovery |
| 短路保护 Short Circuit Protection | | 长期, 自恢复 Long-term, auto recovery |

一般特性 General Features

| | | |
|-------------------------------|--|-------------------------|
| 隔离耐压 Withstand voltage | 输入对输出 (1分钟, 漏电流 ≦ 5mA) I/P-O/P (1Mintute, leakage current) ≦ 5mA) | 4000VDC |
| 绝缘电阻 Isolation resistance | 1000V | ≧ 100MΩ |
| MTBF | 环境 25°C Environment 25°C | 2.0*10 ⁵ Hrs |
| 开关频率 switching frequency | | 65KHz |
| 工作温度 Operating temperature | 55°C 以上降额使用 Above 55°C derating make | -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 |

命名方式 Naming Rules

JWD X10-700 S5S12I



- 隔离输出
Isolate output
- 输出电压 V_{o2}
Output voltage V_{o2}
- 输出电压 V_{o1}
Output voltage V_{o1}
- 标称输入电压
Nominal Input voltage
- 输出功率
Output power
- 新能源产品
New enrgy product
- DC/DC 电源模块
DC/DC power module

产品选型 Product selection

| 产品型号 Model No. | 输入电压 Input voltage V_{in} | 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 |
|-------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------------|------------------------------|------------------|
| JWDX10-700S5S12I | 200~1200V | +5V | 0.10~1.00A | ±2% | 150mV | 78% |
| | | +12V | 0.04~0.42A | ±3% | 80mV | |
| JWDX10-700S5S15I | | +5V | 0.10~1.00A | ±2% | 80mV | 79% |
| | | +15V | 0.03~0.34A | ±3% | 120mV | |
| JWDX10-700S5S24I | | +5V | 0.10~1.00A | ±2% | 80mV | 80% |
| | | +24V | 0.02~0.21A | ±3% | 120mV | |
| JWDX10-700S12S5I | | +12V | 0.06~0.62A | ±1% | 100mV | 78% |
| | | +5V | 0.05~0.50A | ±5% | 80mV | |
| JWDX10-1100S5S12I | 200~2000V | +5V | 0.10~1.00A | ±2% | 150mV | 78% |
| | | +12V | 0.04~0.42A | ±3% | 80mV | |
| JWDX10-1100S5S15I | | +5V | 0.10~1.00A | ±2% | 80mV | 79% |
| | | +15V | 0.03~0.34A | ±3% | 120mV | |
| JWDX10-1100S5S24I | | +5V | 0.10~1.00A | ±2% | 80mV | 80% |
| | | +24V | 0.02~0.21A | ±3% | 120mV | |
| JWDX10-1100S12S5I | | +12V | 0.06~0.62A | ±1% | 100mV | 78% |
| | | +5V | 0.05~0.50A | ±5% | 80mV | |

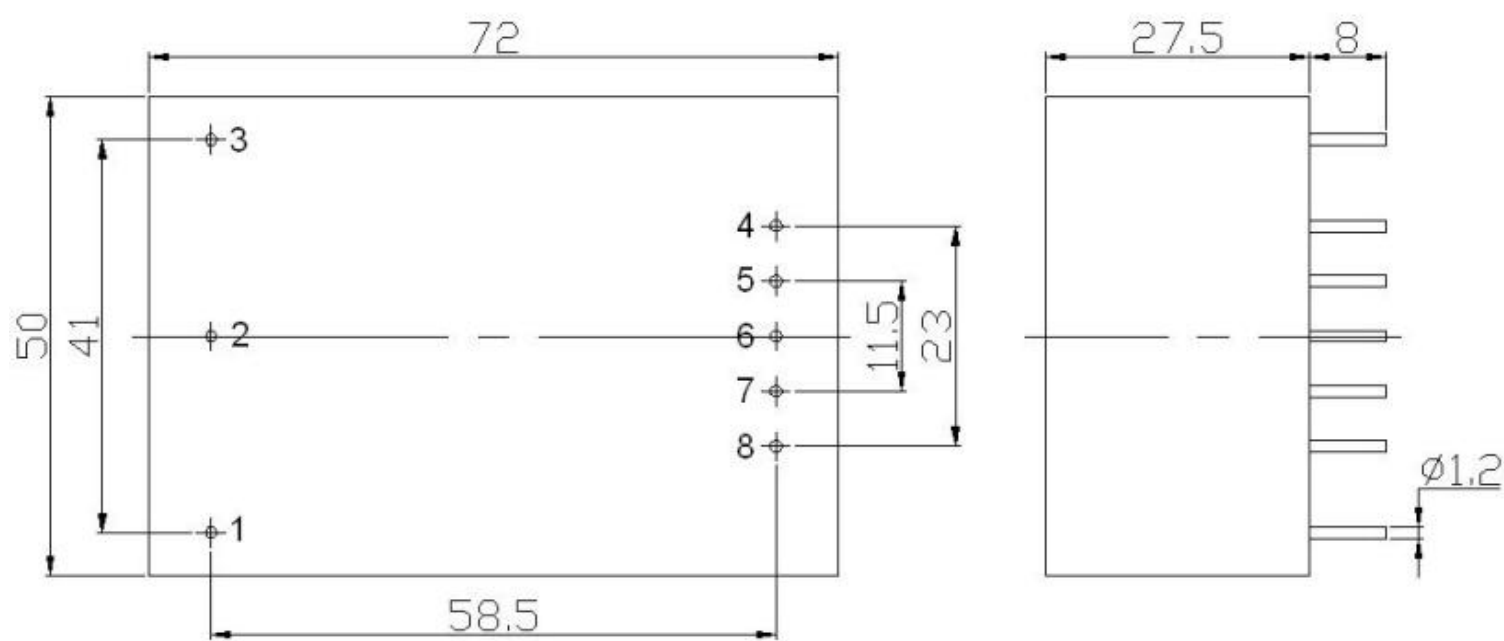
注：因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

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。

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.

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

封装尺寸图 Mechanical Data

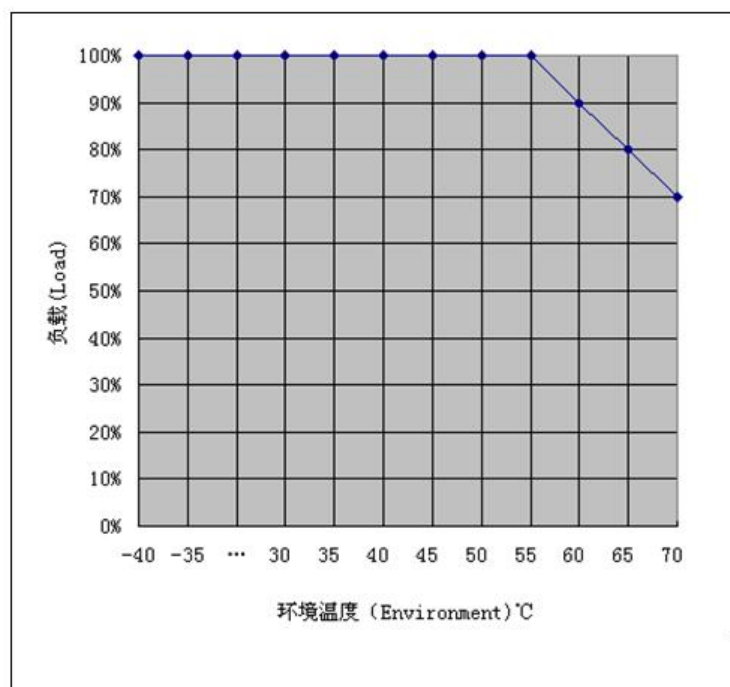


管脚定义 Pin Assignments

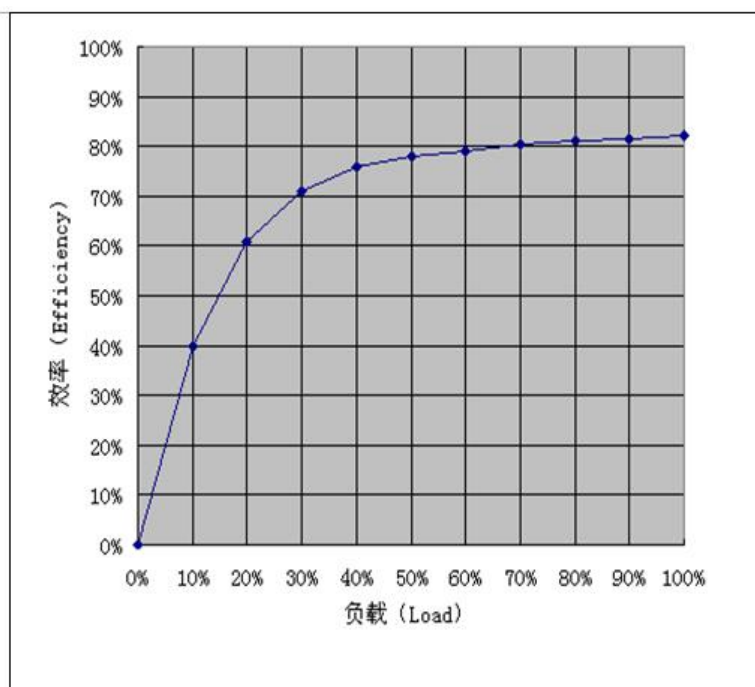
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
|----|-----------|-----------|-----------|------|----|-----------|------|
| FG | V_{in+} | V_{in-} | V_{O2+} | GND2 | NP | V_{O1+} | GND1 |

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

