

JWDA--3W 单路输出 A 型封装系列

JWDA--3W single output A Package type series

典型性能 Typical Performance

- ◆外形尺寸: 25.4*25.4*10.16 (mm)
Dimension: 25.4*25.4*10.16 (mm)
- ◆宽输入电压范围 (2: 1 和 4: 1 输入电压范围)
Wide range input voltage (2: 1 & 4: 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 12V(W) Nominal voltage12V(W)	9.5~18VDC(9.5~36V)
	标称 24V Nominal voltage24V	18~36VDC
	标称 48V(W) Nominal voltage48V(W)	36~72VDC(18~72V)
	标称 110V Nominal voltage110V	72~144VDC

输出特性 Output Features

输出电压精度 Voltage tolerance	标称电压 Nominal voltage	$\cong \pm 1\%$ (3.3V、5V $\cong \pm 2\%$)
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	$\cong \pm 0.5\%$
负载调整率 Load regul	20%~100%负载变化 20%~100% Load change	$V_O \cong \pm 0.5\%$
纹波噪声 Ripple&Noise	20M 带宽 20M Bandwidth	$\cong 1\%$
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、Fullload	见附表 As per list enclosed
过流保护 Output overcircuit Protection		115~150%额定电流,自恢复 115~150%rated output circuit,auto recovery
短路保护 Short Circuit Protection		长期, 自恢复 Long-term,auto recovery
过冲幅度 Overshoot	25% 额定负载变化 25% rated load change	$\cong 25\mu\text{S}$
	$\Delta V_{O1} / V_{O1}$	$\cong \pm 5.0\%$

一般特性 General Features

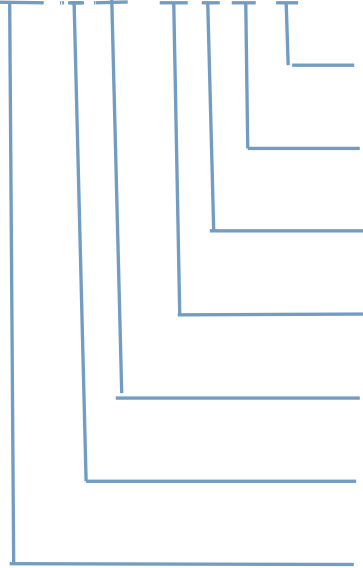
隔离耐压 Withstand voltage	输入对输出 I/P-O/P (1 分钟, 漏电流 $\cong 5\text{mA}$) (1Mintute ,leakage current) $\cong 5\text{mA}$)	1500VDC
绝缘电阻 Isolation resistance	500V	$\cong 100\text{M}\Omega$
MTBF	环境 25°C Environment 25°C	2.0*10 ⁵ Hrs
开关频率 switching frequency		300KHz
最大壳温 The highest shell temperature	工作环境温度较高时, 需加装辅助散热措施, 确保模块表面温度低于 95°C When working environment temperature Is higher, need to add auxiliary colling measures,to ensure thatthesurface temperature below 95°C.	+95°C
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

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
470μF	1000μF	220μF	630μF	100μF	330μF

命名方式 Naming Rules

JWDA3-12S5W



- W: 输入电压 4:1; 无标注: 输入电压 2:1
- W: Input voltage range 4:1; Not marked input voltage range2:1
- 输出电压
Output voltage
- 单路输出
Single Output
- 标称输入电压
Nominal Input voltage
- 输出功率
Output power
- 外形尺寸 25.4*25.4(mm)
Dimension 25.4*25.4(mm)
- DC/DC 电源模块
DC/DC power module

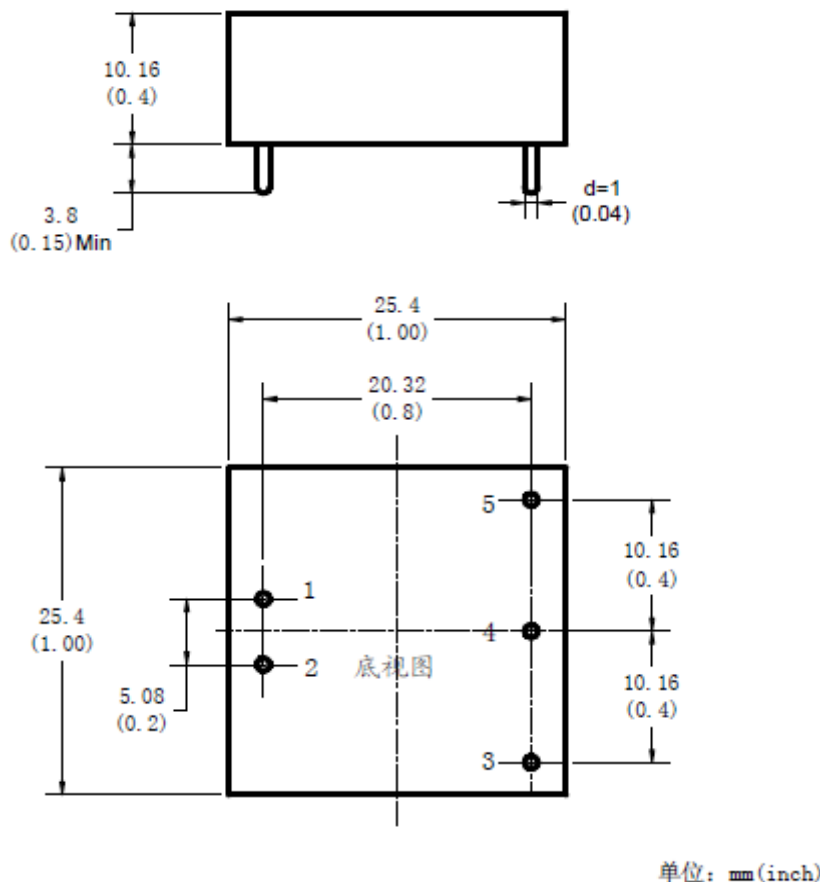
产品选型 Product selection

产品型号 Model No.	输入电压范围 Input voltage V _{in}	输出电压 Output voltage V _O	输出电流 Output current I _O	纹波噪声 R & N V _{(P-P)mV}	效率 Efficiency
JWDA3-12S3.3(W)	9.5~18V 9.5~36V(W)	3.3V	0.91A	50	74%
JWDA3-12S5(W)		5V	0.60A	50	75%
JWDA3-12S12(W)		12V	0.25A	100	76%
JWDA3-12S15(W)		15V	0.20A	100	77%
JWDA3-12S24(W)		24V	0.13A	120	79%
JWDA3-24S3.3	18~36V	3.3V	0.91A	50	74%
JWDA3-24S5		5V	0.60A	50	75%
JWDA3-24S12		12V	0.25A	100	76%
JWDA3-24S15		15V	0.20A	100	77%
JWDA3-24S24		24V	0.13A	120	79%
JWDA3-48S3.3(W)	36~72V 18~72V(W)	3.3V	0.91A	50	74%
JWDA3-48S5(W)		5V	0.60A	50	75%
JWDA3-48S12(W)		12V	0.25A	100	76%
JWDA3-48S15(W)		15V	0.20A	100	77%
JWDA3-48S24(W)		24V	0.13A	120	79%
JWDA3-110S3.3	72~144V	3.3V	0.91A	50	74%
JWDA3-110S5		5V	0.60A	50	75%
JWDA3-110S12		12V	0.25A	100	76%
JWDA3-110S15		15V	0.20A	100	77%
JWDA3-110S24		24V	0.13A	120	79%

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



单位: mm (inch)

管脚定义 Pin Assignments

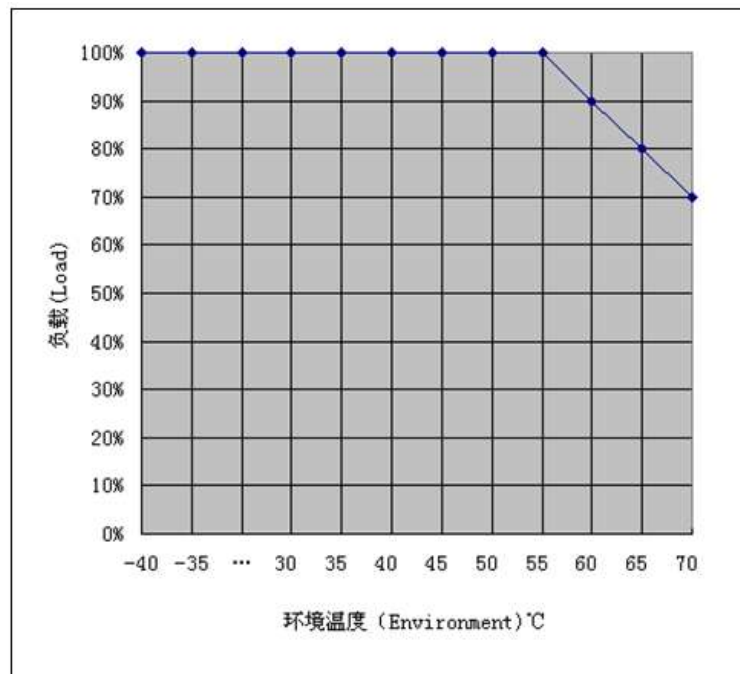
P1	P2	P3	P4	P5
Vin+	Vin-	Vo-	NP	Vo+

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。

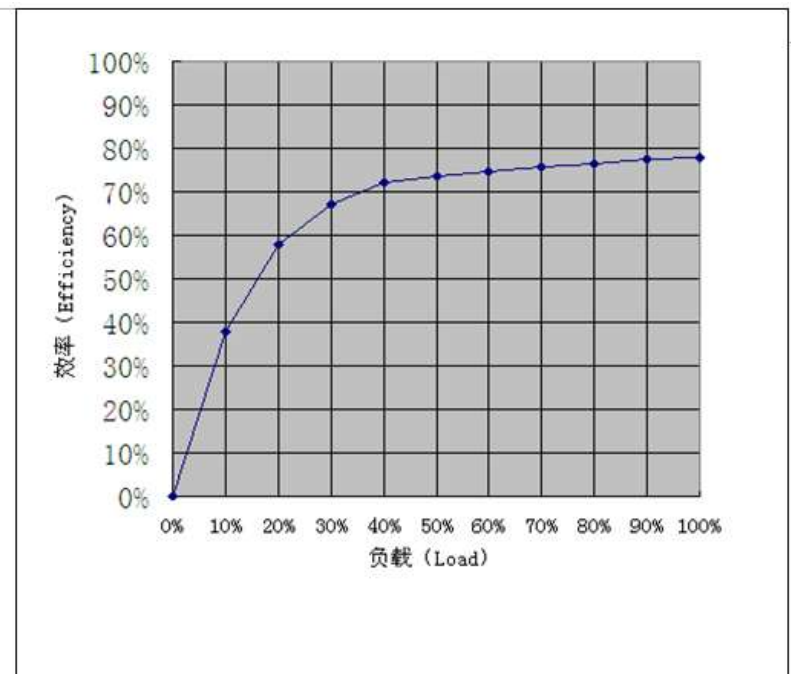
Note: Dimensions and pin definitions of power module such as inconsistent with the hand book, please in kind prevail actual size

典型曲线 Typical curve

降额曲线
Derating curve



效率曲线
Output Derating VS Input Voltage 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

