

JWDA--5W 单路输出 A 型封装系列

JWDA--5W 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) 标称 24V Nominal voltage24V 标称 48V(W) Nominal voltage48V(W) 标称 110V Nominal voltage110V	9.5~18VDC(9.5~36V) 18~36VDC 36~72VDC(18~72V) 72~144VDC
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输出特性 Output Features

输出电压精度 Voltage tolerance	标称电压 Nominal voltage	≅ ±1% (3.3V、5V ≅ ±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	≅ ±0.5%
负载调整率 Load regul	20%~100%负载变化 20%~100% Load change	V _O ≅ ±0.5%
纹波噪声 Ripple&Noise	20M 带宽 20M Bandwidth	≅ 1%
温度系数 Temperature coefficient		±0.02%/°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
启动延迟时间 Turn-on delay time	典型值 Typical value	≅ 300mS
过冲幅度 Overshoot	25%额定负载变化 25% rated load change	≅ 500μ S
	Δ V _{O1} / V _{O1}	≅ ±5.0%

一般特性 General Features

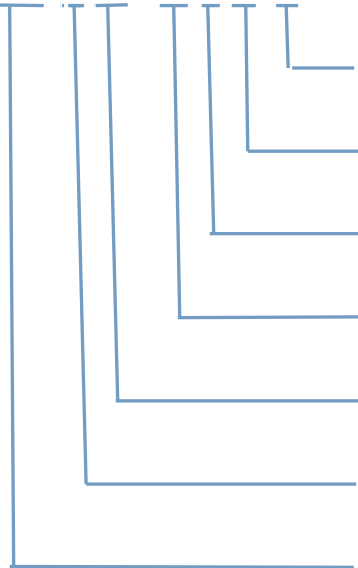
隔离耐压 Withstand voltage	输入对输出 I/P-O/P (1 分钟, 漏电流 ≅ 5mA) (1Mintute ,leakage current) ≅ 5mA)	1500VDC
绝缘电阻 Isolation resistance	500V	≅ 100MΩ
MTBF	环境 25°C Environment 25°C	2. 0*10 ⁵ Hrs
开关频率 switching frequency		300KHz
最大壳温 The highest shell temperature	工作环境温度较高时, 需加装辅助散热措施, 确保模块表面温度低于 95°C When workingenvironment temperature is higher, need to add auxiliary colling measures, to ensure that the surface 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	1200μF	220μF	630μF	100μF	330μF

命名方式 Naming Rules

JWDA5 - 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 range 2:1
 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
JWDA5-12S3.3(W)	9.5~18V 9.5~36V(W)	3.3V	1.52A	50	75%
JWDA5-12S5(W)		5 V	1.00A	50	76%
JWDA5-12S12(W)		12V	0.42A	100	77%
JWDA5-12S15(W)		15V	0.33A	100	78%
JWDA5-12S24(W)		24V	0.21A	120	80%
JWDA5-24S3.3	18~36V	3.3V	1.52A	50	75%
JWDA5-24S5		5 V	1.00A	50	76%
JWDA5-24S12		12V	0.42A	100	78%
JWDA5-24S15		15V	0.33A	100	79%
JWDA5-24S24		24V	0.21A	120	81%
JWDA5-48S3.3(W)	36~72V 18~72V(W)	3.3V	1.52A	50	75%
JWDA5-48S5(W)		5 V	1.00A	50	76%
JWDA5-48S12(W)		12V	0.42A	100	77%
JWDA5-48S15(W)		15V	0.33A	100	79%
JWDA5-48S24(W)		24V	0.21A	120	80%
JWDA5-110S3.3	72~144V	3.3V	1.52A	50	76%
JWDA5-110S5		5 V	1.00A	50	77%
JWDA5-110S12		12V	0.42A	100	79%
JWDA5-110S15		15V	0.33A	100	80%
JWDA5-110S24		24	0.21A	120	82%

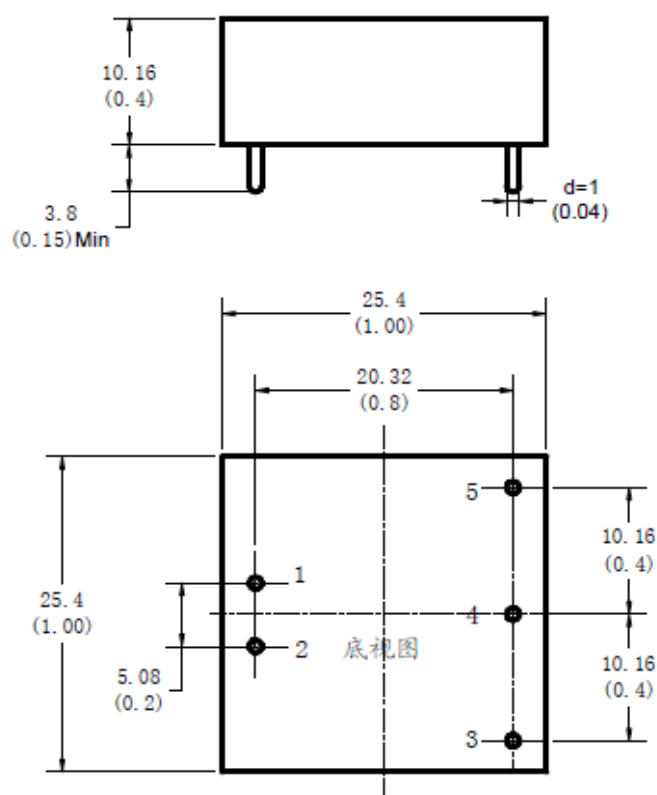
注: 因篇幅有限, 以上只是部分产品列表, 若需列表以外产品, 请与本公司销售部联系。

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

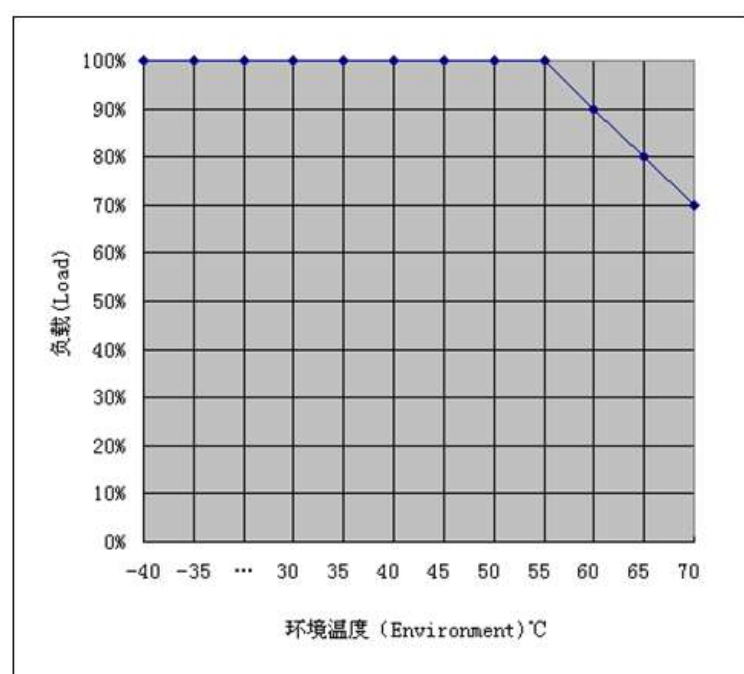
P1	P2	P3	P4	P5
Vin+	Vin-	Vo-	NP	Vo+

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。

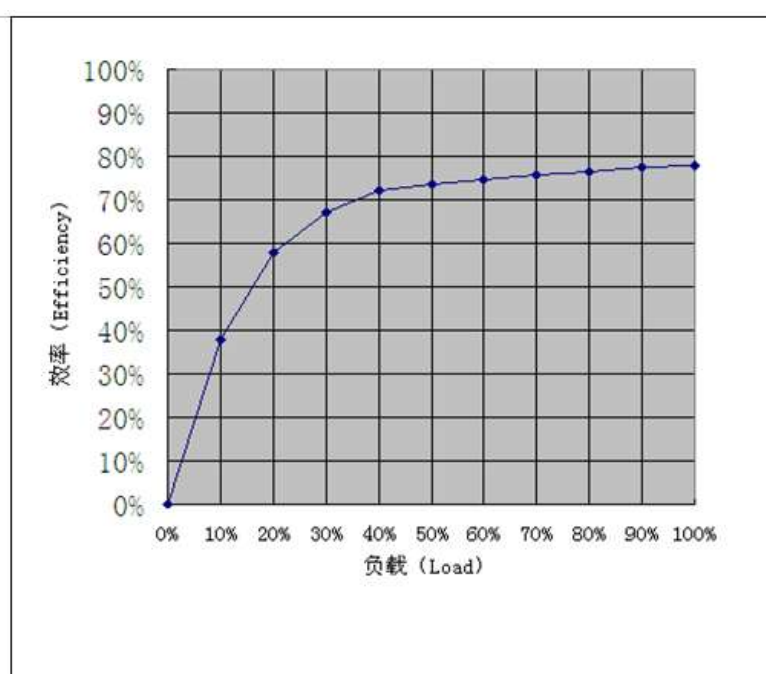
Note: Dimensions and pin definitions of power module such as inconsistent with the hand book, please in kind prevail actual size

典型曲线 Typical curve

降额曲线
Derating curve



效率曲线
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

