



### 典型性能 Typical Performance

- ◆ 交流65~264V或者直流65~375V宽电压输入  
Wide Input Voltage :85~264VAC or 90~375VDC
- ◆ 隔离电压 Isolation voltage: 2000VAC/1mA
- ◆ 效率 Efficiency: 最大 Up to 74%
- ◆ 短路保护 Output Short Circuit Condition
- ◆ 过热保护 Thermal Shutdown Protection
- ◆ 纹波噪声Ripple&noise(20MHz带宽Band Width): 100mVp-p
- ◆ 工作环境温度 Operation Temperature: -40~+70°C
- ◆ 符合RoHS标准 RoHS compliant
- ◆ 平均无故障时间 MTBF > 1000000Hrs

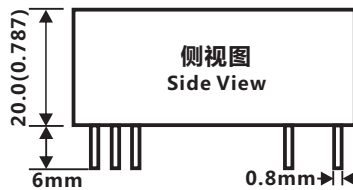
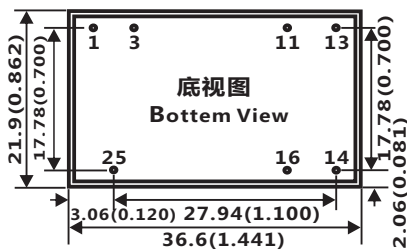
### 典型产品列表 Typical Product Tabulates

型号 Order Code	输入电压 Input Voltage	输出 Output										转换效率 Efficiency (Typ)
		电压(VDC) Voltage		电流(mA) Current		线性调整率(%) Line Regulation		负载调整率(%) Load Regulation		纹波噪声(mV) Ripple&Noise		
		Vo1	Vo2	Io1	Io2	Vo1	Vo2	Vo1	Vo2	Vo1(Typ)	Vo2(Max)	
AC220A05-2W5	AC 85~264V DC 90~375V	+5V	-5V	250	250	±0.5	±1.5	±2	±2	50	100	75%
AC220A12-2W4		+12V	-12V	100	100	±0.5	±1.5	±2	±2	50	100	79%
AC220A15-2W4		+15V	-15V	80	80	±0.5	±1.5	±2	±2	50	100	79%
AC220A24-2W4		+24V	-24V	50	50	±0.5	±1.5	±2	±2	50	100	80%
AC220D05-2W5		+5V	+5V	250	250	±0.5	±1.5	±3	±5	50	100	71%
AC220D0512-2W4		+5V	+12V	250	100	±0.5	±1.5	±3	±5	50	100	73%
AC220D0524-2W4		+5V	+24V	250	50	±0.5	±1.5	±3	±5	50	100	75%
AC220D1224-2W4		+12V	+24V	100	50	±0.5	±1.5	±3	±5	50	100	77%
AC220B03-3W		+3.3V		900		±0.5		±1		50		65%
AC220B05-3W		+5V		600		±0.5		±1		50		70%
AC220B09-3W		+9V		333		±0.5		±1		50		71%
AC220B12-3W		+12V		250		±0.5		±1		50		72%
AC220B15-3W		+15V		200		±0.5		±1		50		72%
AC220B24-3W		+24V		125		±0.5		±1		50		73%
AC220B48-3W		+48V		63		±0.5		±1		50		74%

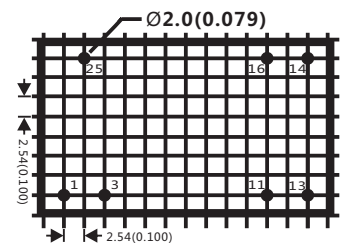
注：如需列表以外产品，请与本公司销售部联系。

Notes : If other than the list of products, please contact the Company's sales department.

### 机械尺寸和引脚定义 Mechanical Dimensions&Pin Connections

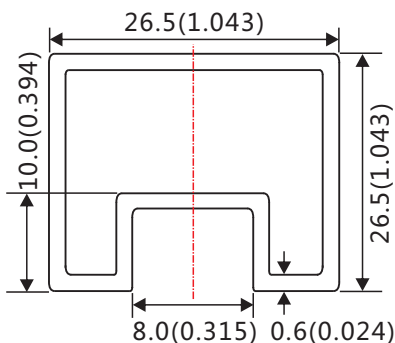


丝印图  
Footprint Details



注Notes: 单位 Unit mm(inches) 公差±0.25mm(0.01inches)

### 包装管尺寸 Tube Outline Dimensions



注Notes:  
单位 Unit mm(inches)  
公差±0.5mm(0.02inches)  
L=530mm,包装数量13pcs  
L=220mm,包装数量5pcs

重量 Weight : 15g

### 引脚定义 Pin connections

Pin	220A	220B	220D
1	AC(L)	AC(L)	AC(L)
3	AC(N)	AC(N)	AC(N)
11	NC	COM	-Vout2
13	NC	-Vout	+Vout2
14	+Vout	+Vout	+Vout1
16	-Vout	COM	-Vout1
25	NC	NC	NC

### 输入特性 Input Characteristics

项目 Parameter	条件 Conditions	最小 Min	典型 Typ	最大 Max	单位 Units
电流 Current	输入标称电压,输出额定负载 Typical input voltage and output load	---	---	0.054	A
电压 Voltage	交流输入 AC Input	85	---	264	V
	直流输入 DC Input	90	---	375	
频率 Frequency		47		63	Hz

### 输出特性 Output Characteristics

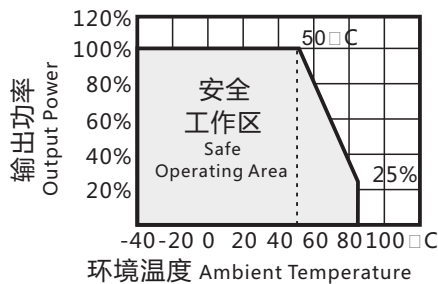
项目 Parameter	条件 Conditions	最小 Min	典型 Typ	最大 Max	单位 Units
功率 Power	详见上表 See Typical Product Tabulates	---	---	3	W
开关频率 Frequence		80	100	120	KHz
电压精度 Voltage Accuracy	输入标称电压,输出额定负载 Typical input voltage and output load	---	±1	±3	%
线性调整率 Line Regulation	输入从低压到高压,输出额定负载 Input=V <sub>Min</sub> form V <sub>max</sub> , Typical output load	---	±0.2	±0.5	%
负载调整率 Load Regulation	输入标称电压,输出负载10%到100% Typical input voltage, Load form 10% to 100%	---	±0.5	±2	%
温漂系数 Temperature Drift Coefficient	环境温度25°C Ambient Temperature = 25°C	---	0.02	---	%
纹波噪声 Ripper & Noise	20MHz带宽 Band Width 20MHz	50	80	100	mV
过流保护 OVP	可选 Optional				
短路保护 SCP	可选 Optional				

### 一般特性 General Characteristics

项目 Parameter	条件 Conditions	最小 Min	典型 Typ	最大 Max	单位 Units
隔离电压 Isolated Voltage	输入对输出 Input to output	2000	---	---	VAC
	输入输出对外壳 I/O-Shell	2000	---	---	VAC
绝缘电阻 Isolated Resistance	输入对输出 Input to output	1000	---	---	MΩ
	输入输出对外壳 I/O-Shell	1000	---	---	MΩ
工作环境温度 Operation Temperature	输入从低压到高压,输出额定负载 Input=V <sub>Min</sub> form V <sub>max</sub> , Typical output load	-40	---	70	°C
储存环境温度 Storage Temperature		-55	---	105	°C
储存环境湿度 Storage Ambient Humidity		---	---	95	%
焊接温度 Lead Temperature	焊点距离外壳1.5mm,10秒 Solder form shell 1.5mm, time 10S	---	---	300	°C
外壳材料 Shell Material	符合UL 94V-0 防火标准 UL 94V-0 Package Material	铝合金,铜镀镍可选 Aluminum alloy or Nickel -plated brass			

#### 温度特性曲线

Temperature Derating Graph



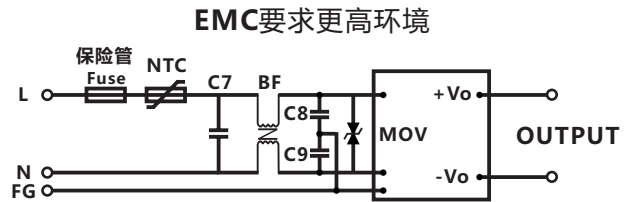
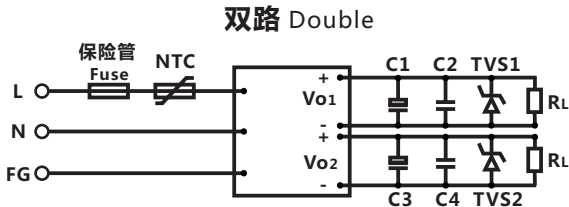
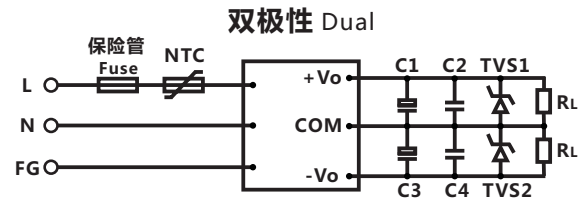
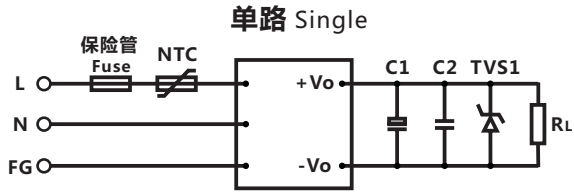
#### 编码规则 Code Rules

**AC J 220A05-3W-T**

① ② ③ ④ ⑤ ⑥ ⑦

- ① 交流输入 AC Input
- ② 空白表示塑料外壳, J表示金属外壳(可选的) Blank-Plastic Shell, J-Metal Shell (Optional)
- ③ 标准输入电压 Nominal Input Voltage : 220-220V(85~264V)
- ④ 输出 Output:A-双极性 Dual, B-单路 Single, D-双路 Double
- ⑤ 标准输出电压 Nominal Output Voltage 03-3.3V,05-5V,12-12V,15-15V,24-24V
- ⑥ 输出功率 Output Power : 3W-3Watt
- ⑦ 输出微调 Trim(可选的Optional)

应用电路 Application Circuits



型号 Order Code	C1(uF)	C2(uF)	C3(uF)	C4(uF)	型号 Order Code	C1(uF)	C2(uF)	C3(uF)	C4(uF)
AC220A05-2W5	120	0.1	220	0.1	AC220B03-3W	330	0.1		0.1
AC220A12-2W4	68	0.1	120	0.1	AC220B05-3W	330	0.1		0.1
AC220A15-2W4	47	0.1	120	0.1	AC220B09-3W	330	0.1		0.1
AC220A24-2W4	47	0.1	68	0.1	AC220B12-3W	220	0.1		0.1
AC220D05-2W5	120	0.1	120	0.1	AC220B15-3W	220	0.1		0.1
AC220D0512-2W4	120	0.1	68	0.1	AC220B24-3W	120	0.1		0.1
AC220D0524-2W4	120	0.1	47	0.1	AC220B48-3W	120	0.1		0.1
AC220D1224-2W4	68	0.1	47	0.1					

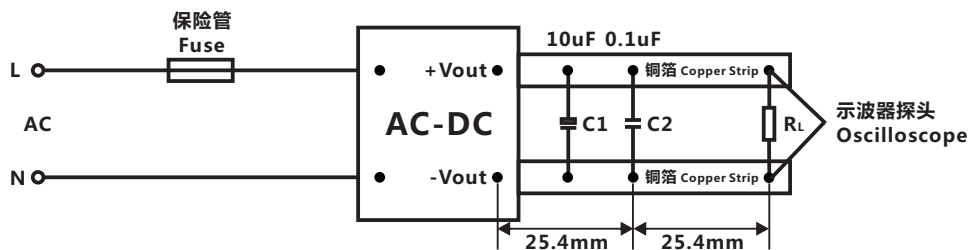
备注:

- 1.建议C1,C3,C5使用高频低阻电解电容,电容耐压降额80%,C2,C4,C6使用0.1uF陶瓷电容,TVS为后级电路保护器件;
- 2.建议使用热敏电阻,推荐型号5D-9;
- 3.如果客户对EMC要求较高,推荐MOV使用471KD07压敏电阻防雷击浪涌,C7使用0.1uF/275V的X电容,C8和C9使用470pF/400V的Y电容,NF使用10mH的共模电感;
- 4.保险管推荐使用1A/250V慢熔的.

Notes:

- 1.Suggest C1, C3, C5 using high frequency&low resistance capacitors, capacitance pressure drop frontal is 80%, C2, C4, C6 use ceramic capacitors, the value is 0.1uF, TVS for the latter stage circuit protection device;
- 2.Suggest using thermistors, recommend model 5D - 9;
- 3.If the customer demand is higher on EMC, recommended MOV using thermistors prevent lightning surge, model 471KD07, C7 use the X capacitance, the value is 0.1 uF/275V, C8 and C9 use Y capacitance, the value is 470pF / 400V, NF use common-mode inductor, the value is 10mH;
- 4.The fuse recommend using 1A / 250V slow melt.

纹波噪声测试 Ripple&Noise Test



这两片铜箔是模拟现实中的电源和它的负载之间的印刷电路,为了减小测试误差,从电压输出点到负载之间的铜箔应采用平行线的连接方式,且示波器探头与地之间的距离必须小于1/2英寸,或者直接焊接到铜箔上.

The two copper strips simulate real-world printed circuit impedances between the power supply and its load. In order to minimize circuit errors and standardize tests between units, scope measurements should be made using BNC connectors or the probe ground should not exceed one half inch and soldered directly to the fixture.