

交直流输入双排直插封装 10W~25W 隔离模块 AC or DC Input DIP Package 10W~25W Isolation



典型性能 Typical Performance

- ◆ 交流85~264V或者直流90~375V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 85%
- ◆ 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)	
AC220A05-10W	AC 85~264V DC 90~375V	+5V	-5V	1000	1000	±0.5	±1.5	±2	±2	50	100	70%
AC220A12-10W		+12V	-12V	416	416	±0.5	±1.5	±2	±2	50	100	72%
AC220A15-10W		+15V	-15V	350	350	±0.5	±1.5	±2	±2	50	100	75%
AC220A24-10W		+24V	-24V	208	208	±0.5	±1.5	±2	±2	50	100	75%
AC220D05-10W		+5V	+5V	1000	1000	±0.5	±1.5	±3	±5	50	100	72%
AC220D0512-10W		+5V	+12V	1000	416	±0.5	±1.5	±3	±5	50	100	76%
AC220D0524-10W		+5V	+24V	1000	208	±0.5	±1.5	±3	±5	50	100	77%
AC220D1224-10W		+12V	+24V	416	208	±0.5	±1.5	±3	±5	50	100	79%
AC220B03-10W		+3.3V		3030		±0.5		±1		50		70%
AC220B05-10W		+5V		2000		±0.5		±1		50		76%
AC220B09-10W		+9V		1111		±0.5		±1		50		78%
AC220B12-10W		+12V		833		±0.5		±1		50		80%
AC220B15-10W		+15V		666		±0.5		±1		50		81%
AC220B24-10W		+24V		416		±0.5		±1		50		82%
AC220B48-10W		+48V		208		±0.5		±1		50		85%
AC220A05-20W		+5V	-5V	2000	2000	±0.5	±1.5	±2	±2	50	100	72%
AC220A12-20W		+12V	-12V	833	833	±0.5	±1.5	±2	±2	50	100	75%
AC220A15-20W		+15V	-15V	650	650	±0.5	±1.5	±2	±2	50	100	76%
AC220A24-20W		+24V	-24V	417	417	±0.5	±1.5	±2	±2	50	100	76%
AC220D05-20W		+5V	+5V	3900	100	±0.5	±1.5	±3	±5	50	100	75%
AC220D0512-20W		+5V	+12V	2000	833	±0.5	±1.5	±3	±5	50	100	78%
AC220D0524-20W		+5V	+24V	2000	417	±0.5	±1.5	±3	±5	50	100	79%
AC220D1224-20W		+12V	+24V	833	417	±0.5	±1.5	±3	±5	50	100	81%
AC220B03-20W		+3.3V		6060		±0.5		±1		50		73%
AC220B05-20W		+5V		4000		±0.5		±1		50		75%
AC220B09-20W		+9V		2222		±0.5		±1		50		77%
AC220B12-20W		+12V		1666		±0.5		±1		50		81%
AC220B15-20W		+15V		1333		±0.5		±1		50		83%
AC220B24-20W		+24V		833		±0.5		±1		50		85%
AC220B48-20W		+48V		416		±0.5		±1		50		87%
AC220A05-25W		+5V	-5V	2500	2500	±0.5	±1.5	±2	±2	50	100	72%
AC220A12-25W		+12V	-12V	1041	1041	±0.5	±1.5	±2	±2	50	100	74%
AC220A15-25W		+15V	-15V	833	833	±0.5	±1.5	±2	±2	50	100	75%
AC220A24-25W		+24V	-24V	625	625	±0.5	±1.5	±2	±2	50	100	75%
AC220D05-25W		+5V	+5V	2500	2500	±0.5	±1.5	±3	±5	50	100	76%
AC220D0512-25W		+5V	+12V	2500	1041	±0.5	±1.5	±3	±5	50	100	78%
AC220D0524-25W		+5V	+24V	2500	625	±0.5	±1.5	±3	±5	50	100	80%
AC220D1224-25W		+12V	+24V	1041	625	±0.5	±1.5	±3	±5	50	100	81%
AC220B03-25W		+3.3V		7500		±0.5		±1		50		73%
AC220B05-25W		+5V		5000		±0.5		±1		50		74%
AC220B09-25W		+9V		2777		±0.5		±1		50		78%
AC220B12-25W		+12V		2083		±0.5		±1		50		82%
AC220B15-25W		+15V		1666		±0.5		±1		50		83%
AC220B24-25W		+24V		1042		±0.5		±1		50		85%
AC220B48-25W		+48V		520		±0.5		±1		50		87%

交直流输入双排直插封装 10W~25W 隔离模块 AC or DC Input DIP Package Isolation

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	---	---	0.408	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

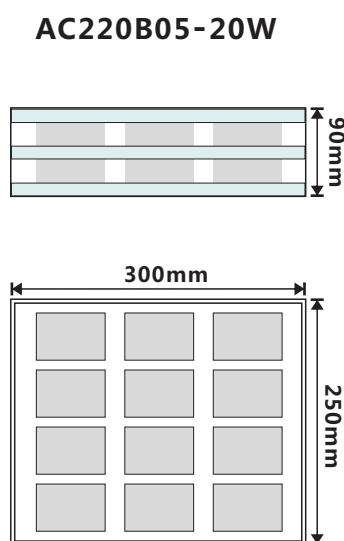
输出特性 Output Characteristics

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	---	---	25	W
开关频率 Frequency		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 _{Min} form V _{max} , 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				

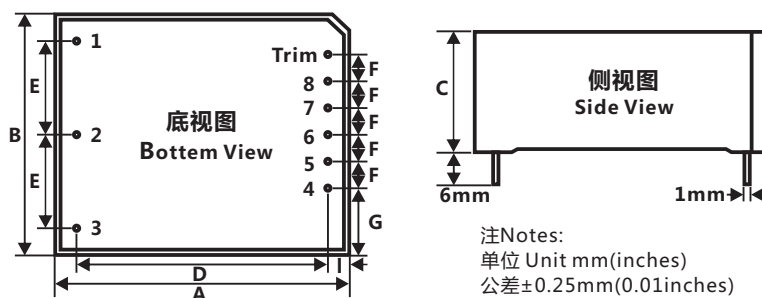
一般特性 General Characteristics

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 _{Min} form V _{max} , 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			

包装管尺寸 Tube Outline Dimensions



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



机械尺寸 Mechanical Dimensions

(mm)	10W	20W	25W
A	55.0	62.0	71.6
B	45.0	45.0	50.0
C	22.5	22.5	23.5
D	47.0	54.0	58.4
E	17.5	17.5	20.32
F	5.0	5.0	5.72
G	12.5	12.5	13.56
I	4.0	4.0	6.6

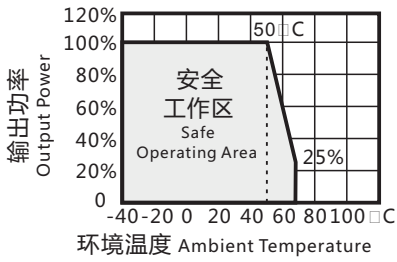
引脚定义 Pin connections

Pin	220A	220B	220D
1	AC(L)	AC(L)	AC(L)
2	AC(N)	AC(N)	AC(N)
3	FG	FG	FG
4	-Vout	-Vout	-Vout1
5	NC	NC	+Vout1
6	NC	COM	NC
7	NC	NC	-Vout2
8	+Vout	+Vout	+Vout2

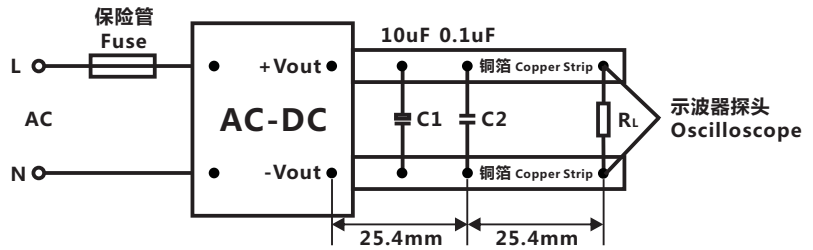
交直流输入双排直插封装 AC or DC Input DIP Package **10W~25W** 隔离模块 Isolation

温度特性曲线

Temperature Derating Graph



纹波噪声测试 Ripple & Noise Test



编码规则 Code Rules

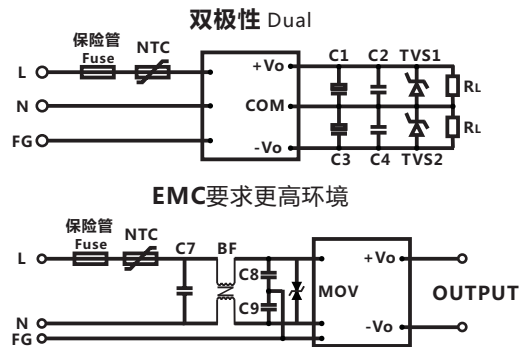
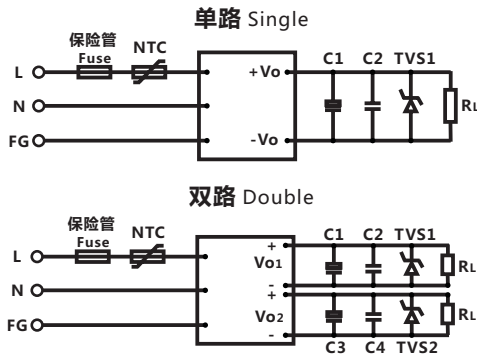
AC J 220 A05-10W-T

- 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: 10W-10Watt
- ⑦ 输出微调 Trim(可选的Optional)

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.

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)
AC220A05-10W	220	0.1	220	0.1	AC220B03-20W	330	0.1		0.1
AC220A12-10W	120	0.1	120	0.1	AC220B05-20W	330	0.1		0.1
AC220A15-10W	120	0.1	120	0.1	AC220B09-20W	220	0.1		0.1
AC220A24-10W	68	0.1	68	0.1	AC220B12-20W	220	0.1		0.1
AC220D05-10W	220	0.1	68	0.1	AC220B15-20W	220	0.1		0.1
AC220D0512-10W	220	0.1	68	0.1	AC220B24-20W	220	0.1		0.1
AC220D0524-10W	220	0.1	47	0.1	AC220B48-20W	120	0.1		0.1
AC220D1224-10W	120	0.1	47	0.1	AC220A05-25W	470	0.1	470	0.1
AC220B03-10W	470	0.1		0.1	AC220A12-25W	330	0.1	330	0.1
AC220B05-10W	330	0.1		0.1	AC220A15-25W	220	0.1	220	0.1
AC220B09-10W	120	0.1		0.1	AC220A24-25W	120	0.1	120	0.1
AC220B12-10W	120	0.1		0.1	AC220D05-25W	330	0.1	330	0.1
AC220B15-10W	120	0.1		0.1	AC220D0512-25W	330	0.1	330	0.1
AC220B24-10W	68	0.1		0.1	AC220D0524-25W	330	0.1	120	0.1
AC220B48-10W	68	0.1		0.1	AC220D1224-25W	330	0.1	120	0.1
AC220A05-20W	470	0.1	470	0.1	AC220B03-25W	470	0.1		0.1
AC220A12-20W	220	0.1	220	0.1	AC220B05-25W	330	0.1		0.1
AC220A15-20W	120	0.1	120	0.1	AC220B09-25W	330	0.1		0.1
AC220A24-20W	68	0.1	68	0.1	AC220B12-25W	330	0.1		0.1
AC220D05-20W	330	0.1	330	0.1	AC220B15-25W	330	0.1		0.1
AC220D0512-20W	330	0.1	220	0.1	AC220B24-25W	120	0.1		0.1
AC220D0524-20W	330	0.1	120	0.1	AC220B48-25W	68	0.1		0.1
AC220D1224-20W	220	0.1	120	0.1			0.1		0.1