

典型性能 Features

- ◆ 20 瓦功率输出 (20 Watts of Output Power)
- ◆ 单路输出 (Singles Outputs)
- ◆ 宽电压输入 (Wide Range Input)
- ◆ 长期短路保护, 自恢复 (Short Circuit Protection ,Automatic Recovery)
- ◆ 小型化封装 (Small Package)
- ◆ 高隔离电压 (Small Package)



电气特性 Electrical Specifications

输入特性 Input	Min	Type	Max	Notes
输入电压范围 Input Voltage Range	85Vac	220Vac	265Vac	
输入频率 Hz Input Frequency	45Hz	50/60Hz	65Hz	
输出特性 Output	Min	Type	Max	Notes
输出电压精度 Set point Accuracy			±2.0%	Vo
输出过压保护 Over-voltage Protection	110%		140%	Vo
负载效应 Load Regulation			±0.5%	Vo
源效应 Line Regulation			±0.5%	Vo
纹波噪声(注 1) Ripple and Noise			50mV 100mV 200mV	Vo≤5V Other Vo≥36V
动态响应 Dynamic Response	4% Vo Pk deviation 400µs settling time			50~75% Load 50~25% Load
温度系数 Temperature Regulation		±0.2%/°C		
短路保护 Short-Circuit Protection	长期短路自恢复 Continuous, Automatic Recovery			
综合特性 General	Min	Type	Max	Notes
隔离电压(注 2) Isolation Voltage			3000Vac	输入与输出 Input-Output
			1500Vac	输入与壳 Input-Case
			500Vac	输出与壳 Output-Case
开关频率 Switching Frequency	50KHz		150KHz	
平均故障间隔时间 MTBF		3×10 ⁵ Hrs		Mil HDBK 217F Tc=25°C
工作壳温 Case Temperature	工业级	-25°C		+85°C
	AD、AG 级	-40°C		+90°C

储存温度 Storage Temperature	-40℃		+105℃	
相对湿度 Relative Humidity	10%		90%	
管脚焊接温度 Pin Solder Temperature			250℃	Wave Solder <10S
手工焊接时间 Hand Soldering Time			5S	Iron Temperature 425 °C
传导 Conducted Emission	GB9254/CISPR22/EN55022 Class B (推荐电路见图)			
静电放电 Electrostatic Discharge	GB17626/EN61000-4-2 Contact ±4KV			
浪涌抗扰度 Surge Immunity	GB17626/EN61000-4-5 ±2KV (推荐电路见图) perf. Criteria B			
脉冲群抗扰度 Electrical Fast Transient	GB17626/EN61000-4-4 ±2KV (推荐电路见图) perf. Criteria B			

注 1: 纹波噪声采用 20MHz 带宽、平行线法测试;

注 2: 交流电压测试漏电流为 5mA, 直流电压测试漏电流为 0.5mA;

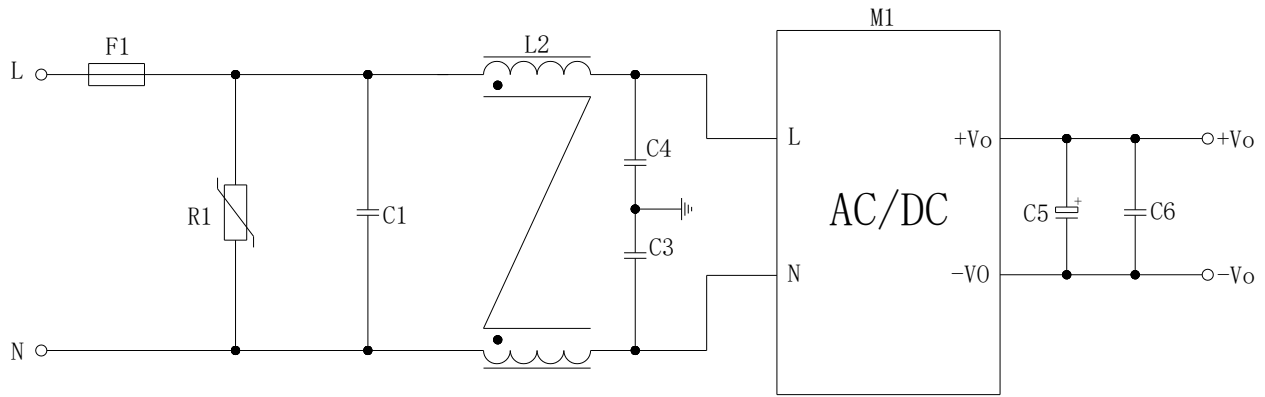
注 3: 若符合相关行业 EMI 标准, 需增加外围推荐电路或者滤波器;

产品型号列表 Product Model List

型号 Models	输入电压范围 (Vac) Input Voltage Range	输出电压 (Vdc) Output Voltage	输出电流 (A) Output current	纹波噪声 (mv) Ripple and noise	典型效率 Efficiency	容性负载 (μF) Max.Capacitor Load
WSA20S3V3	85~265Vac	3.3	4.5	50	74%	4700
WSA20S5	85~265Vac	5.05	4	50	78%	4700
WSA20S9	85~265Vac	9	2.22	100	81%	2200
WSA20S12	85~265Vac	12	1.67	100	83%	1000
WSA20S15	85~265Vac	15	1.33	100	84%	1000
WSA20S18	85~265Vac	18	1.11	100	84%	1000
WSA20S24	85~265Vac	24	0.83	100	85%	1000
WSA20S28	85~265Vac	28	0.71	100	85%	1000
WSA20S36	85~265Vac	36	0.56	100	86%	470
WSA20S48	85~265Vac	48	0.42	200	87%	220

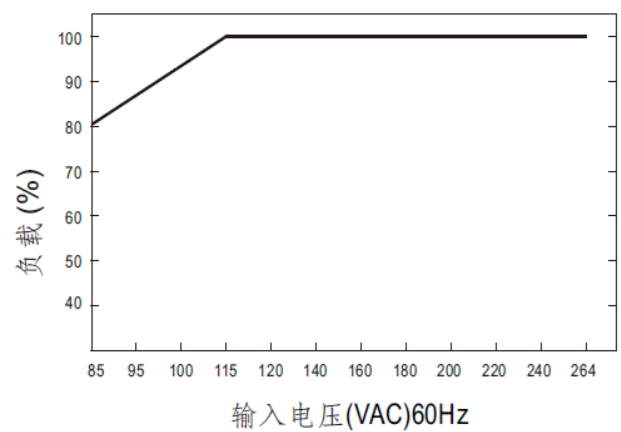
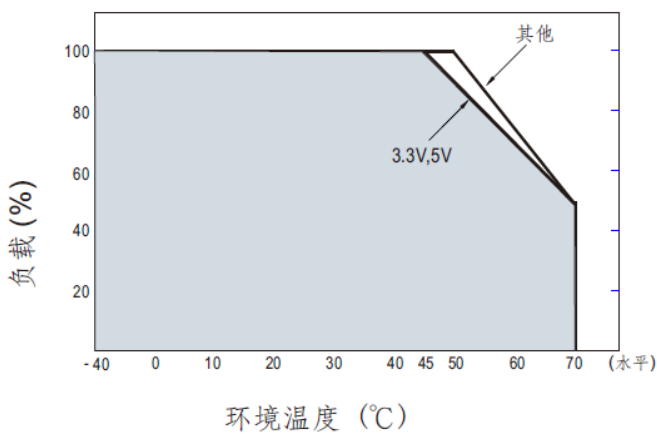
注 4: 未列出型号, 可联系销售定制;

电磁兼容应用 (EMC)

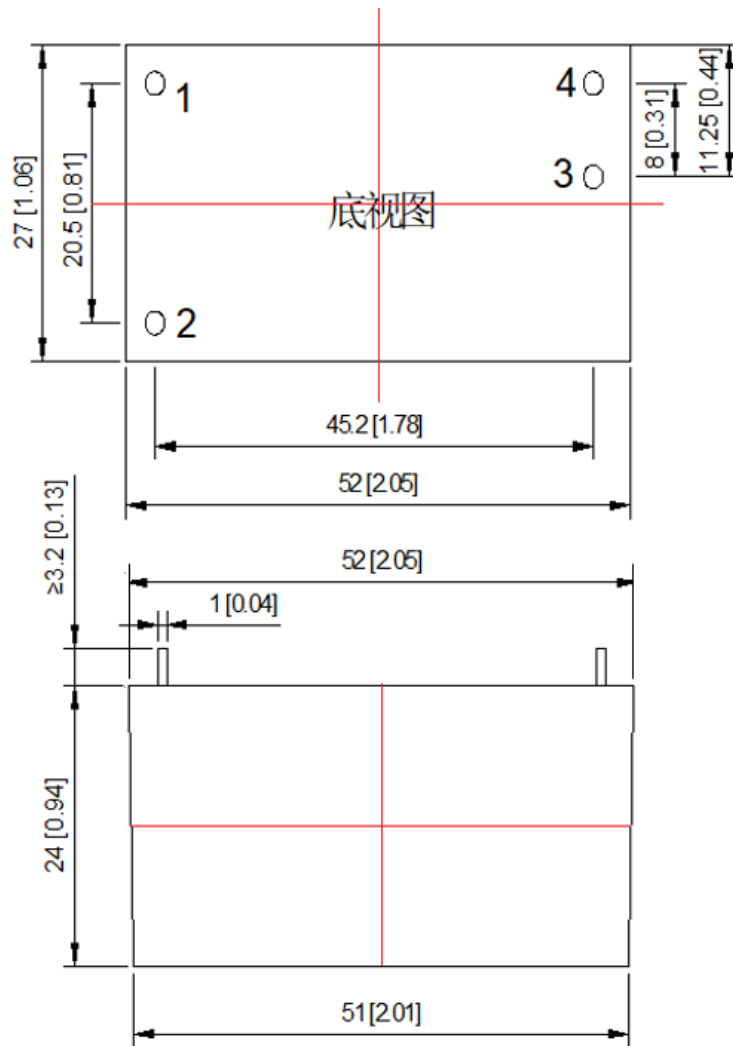


型号	输出电压 5V	输出电压 9V/12V/15V	输出电压 18V/24V
F1(保险丝)	3.15A 慢熔		
R1(压敏电阻)	471KD14		
C1(X 电容)	0.22 μ F/275Vac		
C3/C4(Y 电容)	2.2nF/250Vac		
L2(共模电感)	10mH		
C5(电解电容)	470 μ F/16V	220 μ F/25V	100 μ F/50V
C6(陶瓷电容)	1 μ F/50V		

产品特性曲线



机械图及管脚说明 (Mechanical Chart、Pins) (Unit: mm/inch)



尺寸 52*27*24 (mm)

项目	输入端		输出端	
管脚	1	2	3	4
定义	AC(N)	AC(L)	+Vo	-Vo
说明	零线	火线	输出正	输出负
备注				

注 5: 安装定位尺寸公差按 GB/T1804-2000 F 级标准、外型尺寸公差按 GB/T1804-2000 C 级标准。