

## J20AW SERVES

- ⊙ 封装尺寸Size dimensional: 55.0x45.0x20.5mm
- ⊙ 宽范围输入Wide input voltage range
- ⊙ 转换效率典型Typical efficiency : 85%
- ⊙ 开关频率Switching frequency : 130KHz±10KHz
- ⊙ 过流、短路保护, 自恢复Over current、short circuit protection
- ⊙ 输入与输出高隔离Input-output isolate
- ⊙ PCB板上直插式安装Board in-line type installs
- ⊙ 温度适应范围宽Wide temperature range

### 外形图Outside drawing



### 输入特性Input

输入电压范围 Input voltage range	标称Nom(V)	最小Min(V)	最大Max(V)	输入比Input
	220AC(310Vdc)	85AC(120Vdc)	265AC(380Vdc)	3:1
	220AC(310Vdc)	165AC(200Vdc)	265AC(380Vdc)	1.65:1
输入频率范围	50Hz	47Hz	440Hz	47-440Hz
遥控端ON/OFF	无遥控端No remote		热拔插	不支持

### 输出特性Output

输出电压精度Output voltage accuracy	标称电压Nominal output voltage	Vo1: ±1.0%; Vo2: ±2.0%
源效应Line regulation	标称负载, 全范围Nominal load, gamut	Vo1: ±0.2%; Vo2: ±0.5%
负载效应Load regulation	20%~100%额定负载Rated load	Vo1: ±0.5%; Vo2: ±3.0%
输出纹波及噪声 Output Ripple and noise	20MHz Bm满载Full load	Vo ≤ 5V: ≤ 80mVp-p
		Vo > 48V: ≤ 180mVp-p; 其它电压 ≤ 120mVp-p
动态响应Dynamic response	25%的标称负载阶跃Nom load stepped	ΔVo1/Δt: ±4.0/500us
输出电压调节Output voltage adjust		无调节端
启动延迟时间Start delay time	典型值Typical	≤ 200mS
输出短路保护Short circuit protection	长期短路Continued short circuit protection	打嗝式, 自恢复

### 一般特性General

转换效率Efficiency	Vo ≤ 5.0V: 85%典型Typical	Vo > 5.0V: 87%典型
开关频率Switching frequency	130KHz典型Typical	140KHz最大Max
工作温度Operating temperature	自由空气对流Free air convection	-25℃ ~ +75℃ 工业级
		-40℃ ~ +85℃ 军级
焊接温度Welding temperature	手工焊接Hand welding	360 ± 10℃; 时间: 5~10S
	波峰焊接Wave welding	260 ± 5℃; 时间: 3~5S
储存温度Storage temperature		-40℃ ~ +105℃
相对湿度Relative humidity		10%~90%
外壳材料Case material	UL94V-0黑色塑壳Black plastic case: AP	
隔离电压Isolation voltage	输入与输出Input and output	2.5KVac ≤ 2mA/1分钟Minute
	输入与外壳Input and case	AP: 5KVac ≤ 1mA/1分钟
最小无故障间隔时间 (MTBF)	MIL-HDBK-217 @ 25℃	2X10 <sup>4</sup> Hrs

**J20AW SERVES**
**典型应用Type**

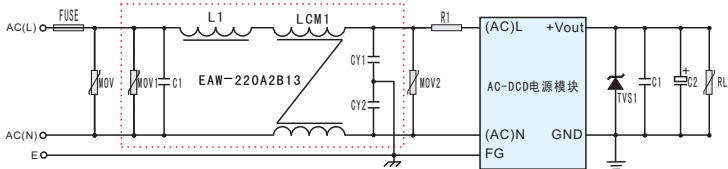
输入电压范围 Input voltage range	标称输出电压/输出电流Nom output voltage/current					
	单路Single		型号Type	双路Dual		型号Type
	V	A		V	A	
165-265Vac 200-380Vdc	3.3V	4.0A	J20AW220S3V3B6	±3.3V	±2.0A	J20AW220D3V3B6
	5V	4.0A	J20AW220S05B6	±5V	±2.0A	J20AW220D05B6
	9V	2.22A	J20AW220S09B6	±9V	±1.11A	J20AW220D09B6
	12V	1.66A	J20AW220S12B6	±12V	±8336mA	J20AW220D12B6
85-265Vac 120-380Vdc	15V	1.33A	J20AW220S15B6	±15V	±666mA	J20AW220D15B6
	18V	1.11A	J20AW220S18B6	±18V	±555mA	J20AW220D18B6
	24V	833mA	J20AW220S24B6	±24V	±416mA	J20AW220D24B6
	48V	416mA	J20AW220S48B6			

**J20AW SERVES**
**EMC特性**

EMI	传导骚扰	CISPR32/EN55032 CLASS B
	辐射骚扰	CISPR32/EN55032 CLASS B
EMS	静电放电	IEC/EN61000-4-2 Contact $\pm 6kV$ /Air $\pm 8kV$ perf.Criteria B
	辐射抗干扰度	IEC/EN61000-4-3 10V/m perf.Criteria A
	脉冲群抗干扰度	IEC/EN61000-4-4 10V/m $\pm 4kV$ perf.Criteria B
	浪涌抗干扰度	IEC/EN61000-4-5 line to Line $\pm 1kV$ perf.Criteria B
		IEC/EN61000-4-5 line to $\pm 2kV$ /line to E $\pm 4kV$ perf. Criteria B (EMC解决方案推荐电路图)
	传导骚扰干扰度	IEC/EN61000-4-6 10Vr.m.s perf.Criteria A
电压暂降、跌落和短时中断抗干扰度	IEC/EN61000-4-11 0%,70% perf.Criteria B	

**设计参考电路Design reference circuit**

1. 典型应用电路：(红色虚框内可选)

**EMC解决方案推荐电路图**


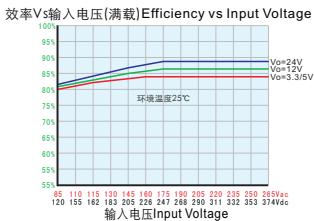
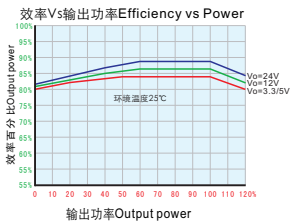
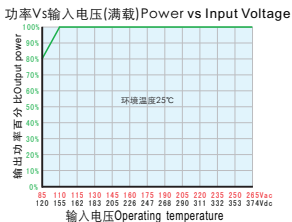
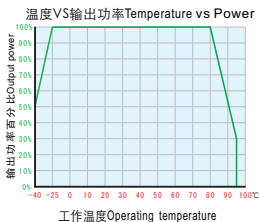
2. 参数列表:

元件型号		推荐值
MOV1	1、虚线内可选。 2、我公EMC辅助器,型号: EAW-220A2B13	14D561K压敏电阻
CY1/CY2		1000PF/400Vac安规电容
C1		0.1uF/275Vac盒形电容
L1		4.7uH/2A电感
LCM1		2.2mH共模电感
MOV2		14D471K压敏电阻
R1		20-25Ω线绕电阻
FUSE		3.15A/250V,延时保险

注：输出滤波C2电容宜采用Lowesr电解电容，容量参考容性负载表，耐压至少额定输出电压1.4倍以上，C1为无极性电容，去除高频噪音，TVS管选用额定输出电压+2V左右，在电源模块输出异常时起到保护后级电路用，推荐增加。

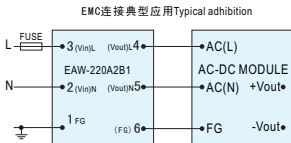
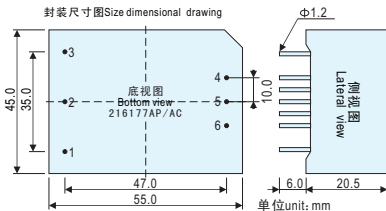
## J20AW SERVES

### 产品特性曲线图 Product characteristic curve chart



注:以上曲线图仅作参考

### 外形尺寸及管脚定义 Size dimensional



注: 保险丝(必须接)按照电源模块设计电流选择  
FUSE According to the current power module design choice

管脚说明 Pin	1	2	3	4	5	6
单路 Single	FG	AC(N)	AC(L)	+Vout	NP	GND
双路 Dual	FG	AC(N)	AC(L)	+Vout1	COM	-Vout2