

## 典型性能 Features

- ◆ 10 瓦功率输出 (10 Watts of Output Power)
- ◆ 超宽电压输入 (4: 1 Wide Range Input)
- ◆ 长期短路保护, 自恢复 (Short Circuit Protection ,Automatic Recovery)
- ◆ 小型化封装 (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		9V	12V/24V	36V	
		18V	24V/48V	72V	
		66V	74V/110V	160V	W型提供40-160V输入
启动延时时间 Start-up Delay Time			10mS		
输出特性 Output		Min	Type	Max	Notes
输出电压精度 Set point Accuracy				±1%	
负载效应 Load Regulation				±0.5%	
源效应 Line Regulation				±0.2%	
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		
输出过流保护 Current Limit Threshold		110%		160%	
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 Isolation Voltage		1500Vdc			Input to Output
开关频率 Switching Frequency			300KHz		
平均故障间隔时间 MTBF			2×10 <sup>6</sup> Hrs		Mil HDBK 217F Tc=25°C
工作壳温 Case Temperature	工业级	-40°C		+90°C	
	AD、AG 级	-40°C		+95°C	
	AHII 级	-55°C		+105°C	

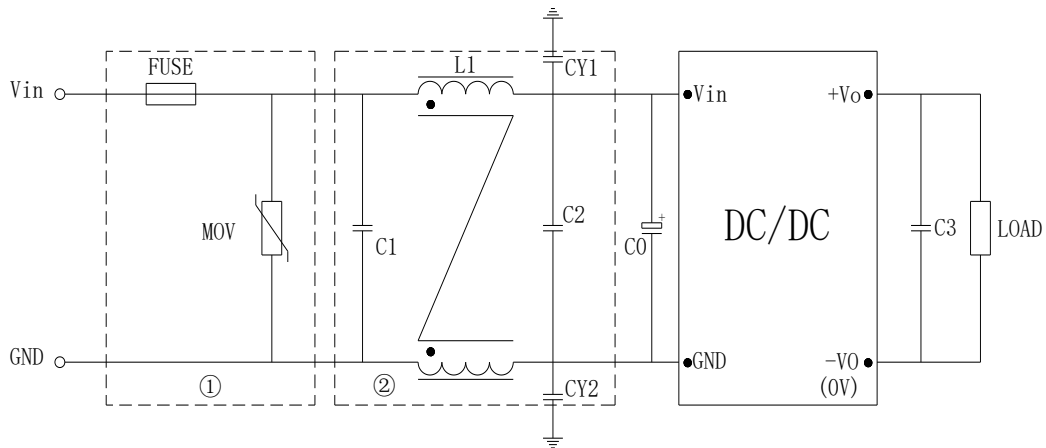
储存温度 Storage Temperature	-55℃		+125℃	
相对湿度 Relative Humidity	10%		90%	
管脚焊接温度 Pin Solder Temperature			250℃	Wave Solder <10S
手工焊接时间 Hand Soldering Time			5S	Iron Temperature 425℃
传导 Conducted Emission	GB9254/CISPR22/EN55022 Class B (推荐电路见图)			
静电放电 Electrostatic Discharge	GB17626/EN61000-4-2 Contact ±6KV air ±8KV perf. Criteria A			
浪涌抗扰度 Surge Immunity	GB17626/EN61000-4-5 ±2KV (推荐电路见图) perf. Criteria A			
脉冲群抗扰度 Electrical Fast Transient	GB17626/EN61000-4-4 ±2KV (推荐电路见图) perf. Criteria A			

型号 Models	输入电压范围 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
WSD10-24S3V3	9-36V	3.3	2.5	50	80%	1000
WSD10-24S5	9-36V	5.05	2.0	50	82%	1000
WSD10-24S9	9-36V	9	1.1	100	83%	680
WSD10-24S12	9-36V	12	0.83	100	84%	470
WSD10-24S15	9-36V	15	0.67	100	84%	470
WSD10-24S24	9-36V	24	0.42	100	86%	220
WSD10-24S48	9-36V	48	0.21	200	82%	100
WSD10-48S3V3	18-72V	3.3	2.5	50	81%	1000
WSD10-48S5	18-72V	5.05	2.0	50	83%	1000
WSD10-48S9	18-72V	9	1.1	100	84%	680
WSD10-48S12	18-72V	12	0.83	100	84%	470
WSD10-48S15	18-72V	15	0.67	100	85%	470
WSD10-48S24	18-72V	24	0.42	100	86%	220
WSD10-48S48	18-72V	48	0.21	200	82%	100
WSD10-110S3V3	66-160V	3.3	2.5	50	80%	1000
WSD10-110S5	66-160V	5.05	2.0	50	82%	1000

WSD10-110S9	66-160V	9	1.1	100	83%	680
WSD10-110S12	66-160V	12	0.83	100	84%	470
WSD10-110S15	66-160V	15	0.67	100	84%	470
WSD10-110S24	66-160V	24	0.42	100	85%	220
WSD10-110S48	66-160V	48	0.21	200	82%	220
WSD10-24D5	9-36V	±5.05	±1.0	50	80%	470
WSD10-24D12	9-36V	±12	±0.42	100	82%	220
WSD10-24D15	9-36V	±15	±0.33	100	82%	220
WSD10-48D5	18-72V	±5.05	±1.0	50	82%	470
WSD10-48D12	18-72V	±12	±0.42	100	84%	220
WSD10-48D15	18-72V	±15	±0.33	100	84%	220
WSD10-110D5	66-160V	±5.05	±1.0	50	80%	470
WSD10-110D12	66-160V	±12	±0.42	100	83%	220
WSD10-110D15	66-160V	±15	±0.33	100	83%	220

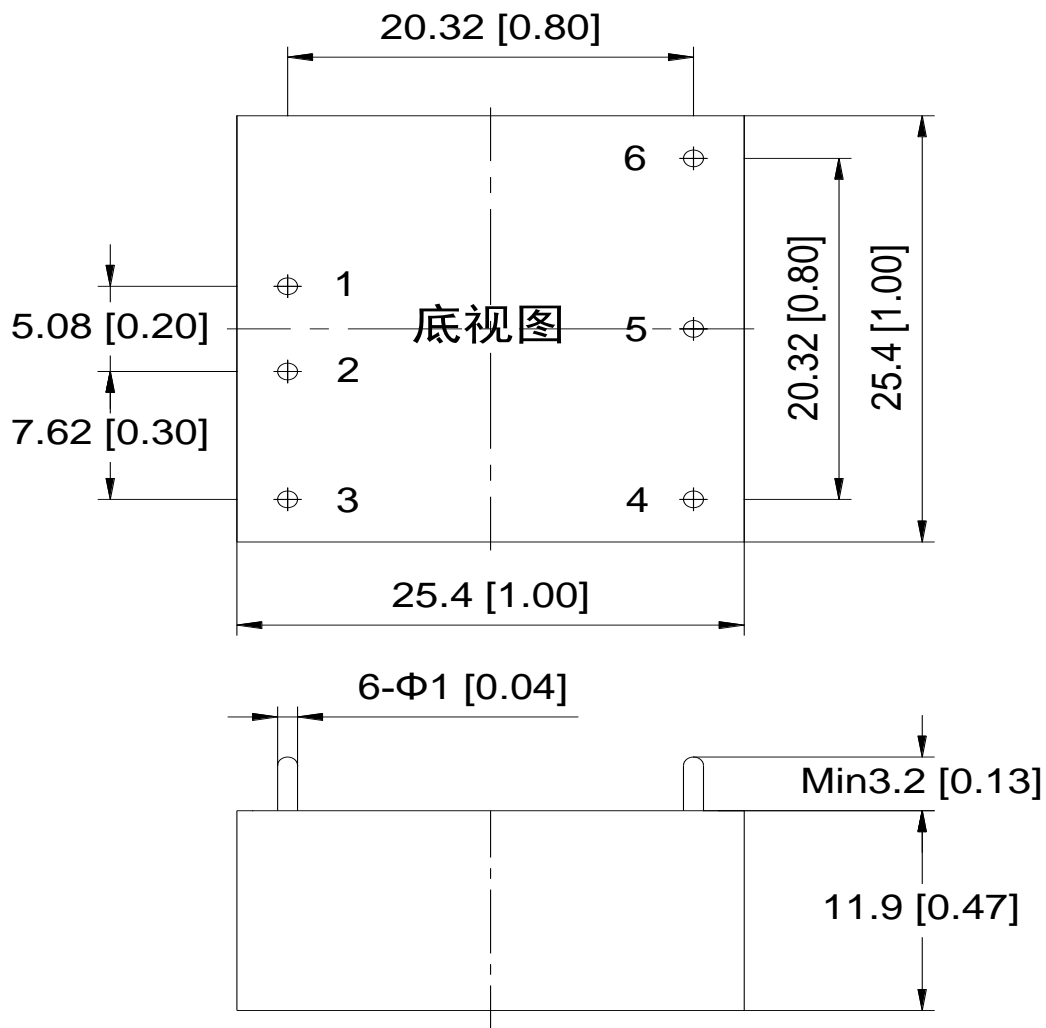
■说明：仅列出典型型号，其它型号，请确定功率，输入电压及输出电压，致电我公司。

## 电磁兼容应用（EMC）



型号	Vin: 24V	Vin: 48V	Vin: 110V
FUSE	2A 慢熔	1A 慢熔	1A 慢熔
MOV	14D101K	14D101K	14D201K
C0	100 $\mu$ F/50V	47 $\mu$ F/100V	47 $\mu$ F/250V
C1、C2	4.7 $\mu$ F/50V	2.2 $\mu$ F100V	1 $\mu$ F250V
C3	100 $\mu$ F		
LCM	3mH		
CY1、CY2	4.7nF Y2 安规电容		

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



管脚 Pin	1	2	3	4	5	6
单路 Single	+Vin/+	-Vin/-	NP	-Vout/GND	NP	+Vout/Vo1
双路 Dual	+Vin/+	-Vin/-	NP	-Vo2	COM	+Vo1

注: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。