

典型性能 Features

- ◆ 3-10 瓦功率输出 (3-10 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	4V	9V/12V	18V	
	9V	12V/24V	36V	
	18V	24V/48V	72V	
启动延时时间 Start-up Delay Time		100mS		
控制功能(10W 自带, 5C 尾缀加 C) ON/OFF Control		ON		CNT 悬空或接TTL高电平 CNT pin left open or CNT pin connected to TTL logic high
		OFF		CNT 与-Vin 相连 CNT pin is at a logic low
逻辑低 Logic Low			1.2 V	
输出特性 Output	Min	Type	Max	Notes
输出电压精度 Set point Accuracy		±1 %	±3 %	
负载效应 Load Regulation		±0.5%	±1 %	
源效应 Line Regulation		±0.2%	±1 %	
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 ⁶ Hrs		Mil HDBK 217F Tc=25°C
工作壳温 Case Temperature	-40°C		+90°C	

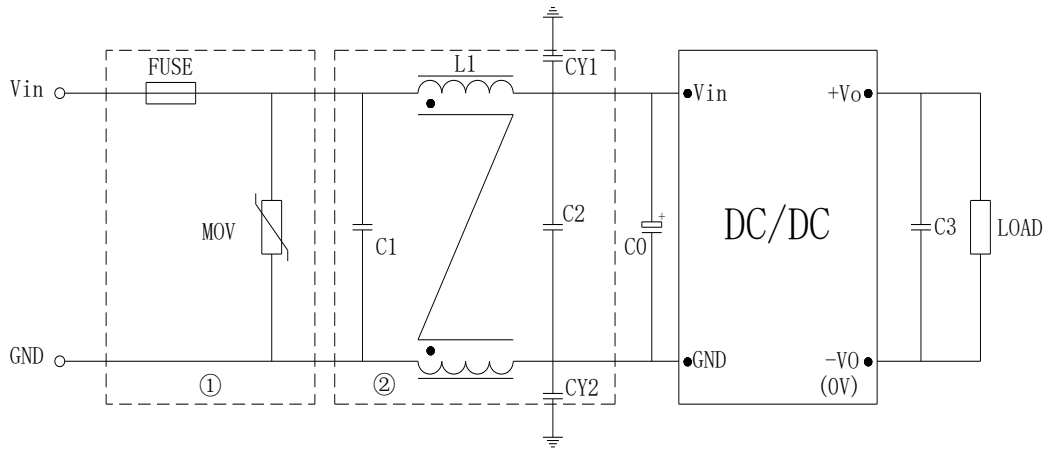
储存温度 Storage Temperature	-55℃		+125℃	
相对湿度 Relative Humidity	10%		90%	
管脚焊接温度 Pin Solder Temperature			250℃	Wave Solder <10S
手工焊接时间 Hand Soldering Time			5S	Iron Temperature 425℃
传导 Conducted Emission	GB9254/CISPR22/EN55022 Class B (推荐电路见图)			
静电放电 Electrostatic Discharge	GB17626/EN61000-4-2 Contact ±6KV air ±8KV			
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
CSIP3-12S3V3	4-18V	3.3	0.6	50	80%	1000
CSIP3-12S5	4-18V	5.05	0.6	50	80%	1000
CSIP3-12S9	4-18V	9	0.33	100	82%	680
CSIP3-12S12	4-18V	12	0.25	100	82%	470
CSIP3-12S15	4-18V	15	0.2	100	82%	470
CSIP3-12S24	4-18V	24	0.13	100	83%	220
CSIP3-12S48	4-18V	48	0.06	200	82%	100
CSIP3-24S3V3	9-36V	3.3	0.6	50	80%	1000
CSIP3-24S5	9-36V	5.05	0.6	50	81%	1000
CSIP3-24S9	9-36V	9	0.33	100	82%	680
CSIP3-24S12	9-36V	12	0.25	100	82%	470
CSIP3-24S15	9-36V	15	0.2	100	82%	470
CSIP3-24S24	9-36V	24	0.13	100	82%	220
CSIP3-24S48	9-36V	48	0.06	200	82%	100
CSIP3-48S3V3	18-72V	3.3	0.6	50	80%	1000
CSIP3-48S5	18-72V	5.05	0.6	50	81%	1000

CSIP3-48S9	18-72V	9	0.33	100	82%	680
CSIP3-48S12	18-72V	12	0.25	100	82%	470
CSIP6-12S3V3	4-18V	3.3	1.5	50	80%	1000
CSIP6-12S5	4-18V	5.05	1.2	50	80%	1000
CSIP6-12S9	4-18V	9	0.67	100	82%	680
CSIP6-12S12	4-18V	12	0.5	100	82%	470
CSIP6-12S15	4-18V	15	0.4	100	82%	470
CSIP6-12S24	4-18V	24	0.25	100	82%	220
CSIP6-12S48	4-18V	48	0.13	200	82%	100
CSIP6-24S3V3	9-36V	3.3	1.5	50	80%	1000
CSIP6-24S5	9-36V	5.05	1.2	50	80%	1000
CSIP6-24S9	9-36V	9	0.67	100	82%	680
CSIP6-24S12	9-36V	12	0.5	100	82%	470
CSIP6-24S15	9-36V	15	0.4	100	82%	470
CSIP6-24S24	9-36V	24	0.25	100	82%	220
CSIP6-24S48	9-36V	48	0.13	200	82%	100
CSIP6-48S3V3	18-72V	3.3	1.5	50	80%	1000
CSIP6-48S5	18-72V	5.05	1.2	50	81%	1000
CSIP6-48S9	18-72V	9	0.67	100	84%	680
CSIP6-48S12	18-72V	12	0.5	100	84%	470
CSIP6-48S15	18-72V	15	0.4	100	84%	470
CSIP6-48S24	18-72V	24	0.25	100	84%	220
CSIP6-48S48	18-72V	48	0.13	200	82%	100
CSIP10-24S3V3	9-36V	3.3	2.5	50	80%	1000
CSIP10-24S5	9-36V	5.05	2.0	50	82%	1000
CSIP10-24S9	9-36V	9	1.1	100	82%	680
CSIP10-24S12	9-36V	12	0.84	100	84%	470
CSIP10-24S15	9-36V	15	0.67	100	84%	470
CSIP10-24S24	9-36V	24	0.42	100	84%	220
CSIP10-24S48	9-36V	48	0.21	200	83%	100

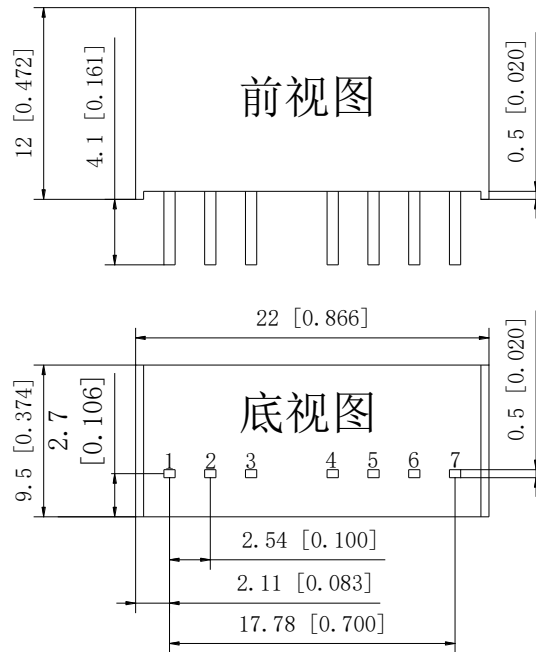
CSIP10-48S3V3	18-72V	3.3	2.5	50	81%	1000
CSIP10-48S5	18-72V	5.05	2.0	50	82%	1000
CSIP10-48S9	18-72V	9	1.1	100	84%	680
CSIP10-48S12	18-72V	12	0.84	100	85%	470
CSIP10-48S15	18-72V	15	0.67	100	85%	470
CSIP10-48S24	18-72V	24	0.42	100	84%	220
CSIP10-48S48	18-72V	48	0.21	200	84%	100

电磁兼容应用 (EMC)



型号	Vin: 12V	Vin: 24V	Vin: 48V
FUSE	5A 慢熔	2A 慢熔	1A 慢熔
MOV	14D506K	14D101K	14D101K
C0	100 μ F/25V	100 μ F/50V	47 μ F/100V
C1、C2	4.7 μ F/25V	4.7 μ F/50V	2.2 μ F/100V
C3	100 μ F		
LCM	1mH		
CY1、CY2	2.2nF Y2 安规电容		

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



单位: mm[inch]
 未注尺寸公差: $\pm 0.5\text{mm}$

管脚 Pin	1	2	3	4	5	6	7
单路 Single	-Vin	+Vin	CNT	NC	+Vo	-Vo	NC

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。