

Key features

- Universal input: 90-265Vac
- Internal EMI filter
- Single output
- Input surge current, over load protection
- Safety class: Class I
- 3 years product warranty

SF100 series --- a super switching power supply offered by Zhongyiguang. The output power of this series module power supply is 100 W , with low leakage current, which is only 0.75mA, the size (127*76*30mm) and isolated pressure up to 3kv, etc. The product is safe and reliable, which has a good EMC. EMC and safety specifications meet the IEC/EN61000-4, CISPR22/EN55022, UL60950/EN60950/EN60601 and other related standards. This series of products are widely used in smart home, high-end decorative lighting, medical, industrial, office and civil industries, such as applied to a relatively harsh environment electromagnetic compatibility must refer to the application circuit.

Electrical specifications

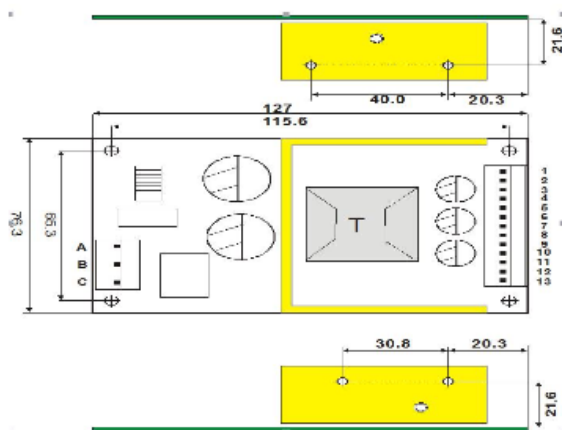
Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)
SF100-S12	90 ~ 265Vac	100	12	8.3	< 120	83
SF100-S15	90 ~ 265Vac	100	15	6.6	< 150	85
SF100-S24	90 ~ 265Vac	100	24	4.2	< 240	85
SF100-S36	90 ~ 265Vac	100	36	2.7	< 240	86

General features

Output	Output voltage accuracy	±1.0% @100%load
	Source effect	±1.0% @100%load
	Load effect	±1.0% @10-100%load
	Starting time (TYP)	3s/230VAC @100%load
	Output hold time(TYP)	16ms/230VAC @100% load
Input	Input voltage range	90 ~ 265VAC
	Input frequency range	47 ~ 63Hz, 440Hzmax
	Input current(TYP)	1.2A MAX/100VAC 0.5A MAX/ 240VAC
	Inrush current(TYP)	Cold boot 50A/115VAC 100 A/230 VAC at full load
	Leakage current (TYP)	<0.75mA at 230VAC/60Hz
Protection	Short circuit protection: automatic recovery after troubleshooting; Over-current protection, 110%--150% load, automatic recovery after troubleshooting.	
Work	Operating Temperature	-40 ~ +70 °C (According to the output load derating)
	Humidity	10 ~ 85% RH

environment	Storage Temperature	-40 ~ +105
	Temperature coefficient	0.03%/ (0~ 50°C)
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes
Safety and EMC (Note:3)	Safety Standard	IEC60950,EN60950,UL60950
	I/O-Isolation voltage	I/P-O/P:3KVAC I/P-FG(CASE):1.5KVAC O/P-FG(CASE):0.5KVAC
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:>100M Ohms/500VDC 25°C 70% RH
	EMI / RFI conducted	EN55011, EN55022 (CISPR22) CLASS B (Note: See the application circuit for details)
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV (Note: See the application circuit for details)
	RF	IEC/EN 61000-4-3 level 4 lev3
	EFT	IEC/EN 61000-4-4 level 4 4kV (Note: See the application circuit for details)
Others	SURGE	IEC/EN 61000-4-5 level 4 2kV
	MTBF	165K hrs min. MIL-HDBK-217F(25)
Notes	Dimension	127*76*30mm (L*W*H)
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature	
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor	
	3. The power supply is considered a component which will be installed into a final equipment.The final equipment must be re-confirmed that it still meets EMC directives	

Dimension



Pin definition	
A	AC(L)
B	AC(N)
C	FG
1	NC
2-7	-Vo
8-13	+Vo

	Pin pitch	Pin type
Pin(1-12)	3.96	Molex5273-13pin
Pin(A-C)	7.92	Molex5273-3pin

Block diagram

