

### 50W Single Output Switching Power Supply

# SMR-S50 Series



#### Features:

- Universal AC input / Full range
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105℃ long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- Withstand 5G vibration test
- · High efficiency, long life and high reliability
- 3 years warranty

#### **SPECIFICATION**

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MODEL		SMR-S50-3.3	SMR-S50-5	SMR-S50-12	SMR-S50-15	SMR-S50-24	SMR-S50-48
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V
ОИТРИТ	RATED CURRENT	10A	10A	4.2A	3.4A	2.2A	1.1A
	CURRENT RANGE	0 ~ 10A	0 ~ 10A	0~4.2A	0 ~ 3.4A	0 ~ 2.2A	0 ~ 1.1A
	RATED POWER	33W	50W	50.4W	51W	52.8W	52.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-p	120mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	3V ~ 3.6V	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	22 ~ 27.2V	42 ~ 54V
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION Note.5	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load					
	HOLD TIME (Typ.)	60ms/230VAC 14ms/115VAC at full load					
	VOLTAGE RANGE	88 ~ 264VAC 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)					
	FREQUENCY RANGE	47 ~ 63Hz					
INPUT	EFFICIENCY(Typ.)	72%	78%	81%	83%	84%	86%
	AC CURRENT (Typ.)	1.3A/115VAC 0.8A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 33A/230VAC					
	LEAKAGE CURRENT	<2mA/240VAC					
PROTECTION		110 ~ 150% rated output power					
	OVER LOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	3.8 ~ 4.45V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	55.2 ~ 64.8V
		Protection type: Hiccup mode, recovers automatically after fault condition is removed					
ENVIRONMENT	WORKING TEMP.	-25 ~ +70°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)					
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes					
	SAFETY STANDARDS	ı <del>-</del>					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
EMC	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
(Note 6)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2) heavy industry level, criteria A					
OTHERS	MTBF	228Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	99*97*36mm (L*W*H)					
	PACKING	0.41Kg; 45pcs/19.5Kg/0.9CUFT					
NOTE	Ripple & noise are measure     Tolerance : includes set up     Line regulation is measure     Load regulation is measure	lly mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ad at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  I from low line to high line at rated load.  d from 0% to 100% rated load.  ered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets					

EMC directives.



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