SPARKLE POWER INT'L LTD.

FSP065-AAB

19V@3.42A
Adapter
Switching Power Supply

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08/27/2007

全漢企業股份有限公司
SPI Electronic Co., Ltd.

Electrical Specification

Electrical Requirements

1. Input Characteristics:

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage		100V / 240V
1.2 Input Voltage Range		90VAC to 264VAC
1.3 Input Frequency Range		47Hz to 63Hz (± 1Hz)
1.4 Input Voltage Harmonic Distortion		≤ 8%
1.5 Input Current	100Vac, 240Vac / 3.42A load	≤ 1.5A
1.6 Efficiency: (Warm up 10minutes later)	100Vac / 3.42A 240Vac / 3.42A	≥ 84% ≥ 84%
1.7 No Load Power Consumption	240Vac / 0A load	≤ 0.5W
1.8 Input Inrush Current	100Vac (cold start) 240Vac (cold start)	≤ 50A ≤ 100A

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2. Output Characteristics:

※Measured at the end of DC cable.

ITEM	CONDITION	SPECIFICATION
2.1 Output Rated Voltage		19V
2.2 Output Current	at constant voltage mode	0A to 3.42A
2.3 Output Voltage Setting	at the output end of DC cable .	19V ± 5%
2.4 Output Voltage Ripple and Noise: (0.1uF Ceramic Cap. and 35V 47uF Aluminum Cap. Paralleled between the end of output cable)	90Vac / 3.42A 264Vac / 3.42A	≤ 300mVp-p
2.5 Output Overshoot Voltage:	From 65W load to no load, the output Overshoot voltage.	≤ 8% of Vo
2.6 Turn-On Delay Time:	At 100Vac / 65W load, output voltage shall remain regulation	≤ 2Sec.
2.7 Hold Up Time:	At 100Vac or 240Vac / 65W load, output voltage shall remain regulation	≥ 6 mS
2.8 Rise Time:	At 100Vac / 65W load, DC output rise time from 5% to 95% of Vo	≤ 50mS
2.9 Dynamic Load Change:	Output load step is 50% of full load, S/R=0.5A/us, frequency is 100Hz and 10KHz, the output regulation will be	19V ± 5%

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3. Protection Characteristics:

ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection:	The adapter can withstand continuous short at DC output and no damage, it will enter into normal condition if the fault condition is removed.	No broken, no smoke. (Auto-recovery mode)
3.2 Over-Voltage Protection	The adapter will enter into shut down that means no output while over voltage happened at output terminal that caused by internal fault. the output trip voltage will be less than 25V. That might be return to normal state by AC reset, reset ≦ 2 minutes.	(Latch mode)
3.3 Over Current Protection:	The max. Output current will be 5.5A while output is constant resistor mode.	(CC mode)
3.4 Over Temperature Protection:	No deformation and no discoloration on case and will be shut down. That will be return to normal state by AC reset, reset≦ 2 minutes.	(Auto-recovery mode)

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4. Environmental Characteristics:

ITEM	CONDITION	SPECIFICATION
4.1 Electric Fast Transients : Refer to IEC1000- 4-4 level 3	Impulse: ±1kV applied to L,N and chassis, pulse duration 50nS period 5 mintes. Input voltage 110Vac and 65 W load. Impulse: ±2kV applied to L, N and chassis, pulse duration 50nS period 5 minutes. Input voltage 110Vac and 65W load.	No function error No damage
4.2 Lightning Surge: Refer to IEC1000-4-5 level 3	±1kV applied between line and line, pulse rise time 1.2us and duty time 50uS, 10 times test each one. ±2kV applied between line and line or line and power ground (signal ground), pulse rise time 1.2us and duty time 50uS, 10 times test each one.	No function error No damage
4.4 Electron Static Discharge: (Refer to IEC1000-4-2 Energy Storage Capacitor 150pF; Discharge Resistor 330Ω)	Air Discharge: ± 15KV min. Contact Discharge: ±8KV min.	No function error No function error
4.5 Cooling	Natural air cooling	
4.6 EMI: Adapter comply with the following national standards: EMI Conducted Emission EMI Radiated Emission	FCC. DOCKET 20780. PART 15J. CLASS B CISPR22 : 1993/EN55022(1994):CLASS B VCCI CLASS Ⅱ	Test with system.
4.7 Safety conforming:	UL, c-UL, TUV/GS, NEMKO+CB	Depends on customer's requirement.
4.8 Leakage Current	240Vac / 60Hz 100Vac / 60Hz	≤ 100uA ≤ 60uA

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ITEM	CONDITION	SPECIFICATION
4.9 Insulation Resistance:	Between AC input and secondary applied 500Vdc for 1 minute.	≥ 30MΩ
4.10 Dielectric Strength: (Hi-Pot)	Between AC input and secondary AC 3KV, test time 1 minute, and cut off current shall be less than 10mA AC 3kV, test time 1 sec. In production line	
4.11 Temperature:	Operating Storage	0 to 40℃ -20 to +80℃
4.12 Humidity:	Operating Storage	20% ~ 80% 10% ~ 90%

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5. Mechanical Characteristics:

ITEM	CONDITION	SPECIFICATION
5.1 Dimension (Length x Width x Height)		114.5x49.5x29.5 mm
5.2 Adapter weight Case material		280g (typical)
5.3 Input AC socket Type		IEC 320 C6 Type
5.4 Output DC Cable Length Wire style		 1800±50mm UL 1571 18AWG
5.5 Color Case DC Cable (including Molding Core)		 Black Black