

SPECIFICATION



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全漢企業股份有限公司
FSP TECHNOLOGY INC.

台灣桃園市桃園區建國東路22號 統一編號：84239055
No. 22, Jianguo E. Rd., Taoyuan Dist., Taoyuan City 330, Taiwan (R.O.C)
TEL: +886-3-375-9888 Website: www.FSP-group.com
FAX: +886-3-375-6966 Email: sales@fsp-group.com.tw

Efficiency Testing Criteria

The Product Meet	Regulation	Output Voltage	Output Power	Average Efficiency in Active Mode	Maximum Power in No Load
	Energy-related Products 【DoE】 VI	<6V	>25W	$\geq 84.25\%$	$\leq 0.1W$



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AC Adapter

FSP025M-DPA

P.E	R/D	APPROVED	REV.
Victor	Jerry Lai	Shipu	007

:

Electrical Requirements

1. Input Characteristics:

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage:		100Vac~240Vac
1.2 Input Voltage Range:		85Vac to 264Vac
1.3 Input Frequency Range:		47Hz to 63Hz (\pm 1Hz)
1.4 Input Current:	115Vac, 230Vac / Full load	0.8~0.35A
1.5 Meet DOE LEVEL VI:	(1)115Vac / 0A load (2)115Vac / 25%,50%,75%,100% load (Average Active Mode Efficiency, Warm up 30 minutes later)	$\leq 0.1W$ $\geq 84.25\%$
1.6 Inrush Current:	100Vac, 240Vac / Full load	The cold inrush current must not cause the input fuse to open or cause damage to components.

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2. Output Characteristics:

※Measured at the end of DC cable.

ITEM	CONDITION	SPECIFICATION
2.1 Output Rated Voltage:		5V \pm 5%
2.2 Output Current:	at constant voltage mode	0A to 5A
2.3 Output Voltage Setting:	at the output end of DC cable	5V \pm 5%
2.4 Output Voltage Ripple and Noise: (0.1uF Ceramic Cap. and 63V 47uF Aluminum Cap. Paralleled between the end of output cable)	115Vac, 230Vac / 0A~5A load	\leq 100mVp-p
2.5 Turn-On Delay Time:	At 115Vac / 5A load, output voltage shall remain regulation	\leq 1.5 Sec
2.6 Hold Up Time:	At 115Vac or 230Vac / 5A load, output voltage shall remain regulation	\geq 12ms
2.7 Dynamic Load Change:	(1) Output load step is : 【1】 0 % ~50 % 【2】 50 %~100 % (2) S/R=0.5A/us (3) Frequency is 50Hz,100Hz,1KHz	5V \pm 10%

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3. Protection Characteristics:		
ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection:	115Vac, 230Vac / Full load	Output can be shorted without damage, and auto recovery.
3.2 Over Voltage Protection:	115Vac, 230Vac / Full load	The voltage will not exceed the upper trip 10V.
3.3 Over Current Protection:	115Vac, 230Vac / Full load	Output current limit : 8A(Max)
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4. Environmental Characteristics:

ITEM	CONDITION	SPECIFICATION
4.1 Safety Standard:	UL60601-1 TUV EN 60601-1 IEC 60601-1 Anticipate IEC 62368-1(design meet)	
4.2 EMC	EN55032 EN61000-3-2 EN61000-3-3 EN55024	
4.2.1 EMI: Conducted Emission Radiated Emission	115Vac,60Hz & 230Vac,50Hz 115Vac,60Hz & 230Vac,50Hz	EN55032 Class B Class B
4.2.2 Input Current Harmonic Refer to IEC61000-3-2	Harmonic distortion	Class A and D
4.2.3 Line Flicker Refer to IEC61000-3-3		
4.2.4 Electron Static Discharge: (Refer to IEC61000-4-2 Energy Storage Capacitor 150pF; Discharge Resistor 330Ω)	Air Discharge: ± 15 KV Contact Discharge: ± 8 KV	Normal operation shall be continued
4.2.5 Radiated Immunity Refer to IEC61000-4-3	80~1000MHz:3V/m	Normal operation shall be continued
4.2.6 Electric Fast Transients Refer to IEC61000-4-4	Impulse: ±2kV applied to L,N	Normal operation shall be continued
4.2.7 Lightning Surge: Refer to IEC61000-4-5	±1KV(2 ohm) applied differential mode ±2KV(12 ohm) applied common mode	Normal operation shall be continued
4.2.8 Conducted Immunity Refer to IEC61000-4-6	3V rms	Normal operation shall be continued
4.2.9 Magnetic Field Immunity Refer to IEC61000-4-8	1A/m	Normal operation shall be continued
4.2.10 Voltage Dips Immunity Refer to EN61000-4-11	115Vac/60Hz 30% reduction for 30 cycles 100% reduction for 1 cycles 100% reduction for 0.5 cycles 230Vac/50Hz 30% reduction for 30 cycles 100% reduction for 1 cycles 100% reduction for 0.5 cycles	Criteria: A A A A A A

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4.3 Cooling	Convection cooling	
4.4 Earth Leakage Current	264Vac,63Hz	≤ 150uA
4.5 Touch Current	264Vac,63Hz	≤ 100uA
4.6 Dielectric Strength: (Hi-Pot)	Input to Output Input to Ground Output to Ground	4000VAC 1500VAC 500VAC
4.7 Temperature:	Operating Storage	0 to 40°C -20 to +80°C
4.8 Humidity	Operating Storage	20% ~ 80% 10% ~ 90%
4.9 Altitude		5000 meter
4.10 Vibration Test	Vibration Operation, 0.01g ² /Hz at 5 Hz sloping to 0.02g ² /Hz at 20 Hz, and maintaining 0.02g ² /Hz from 20 Hz to 500 Hz. The area under the PSD curve is 3.13gRMS. The duration shall be 20 minutes per axis for all three axes on all samples.	Normal operation shall be continued.
4.11 Shock Test	Storage All 6 sides; 30G, 11mSec. Half-sine wave pulse in both directions on three mutually perpendicular axes. Operating All sides except top; 5G, 11mSec. Half-sine wave pulse in both directions on three mutually perpendicular axes.	Normal operation shall be continued.
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5.Mechanical Characteristics:

ITEM	CONDITION	SPECIFICATION
5.1 Dimension (Length x Width x Height):		110 X 50 X 32 mm
5.2 Adapter weight:		180g (typical)
5.3 Input AC socket Type:		IEC 320-C14 Type
5.4 Color	Case DC Cable	Black Black

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