



# Switching Power Supply Approval Sheet

Customer : 研華股份有限公司  
Model : FSP090-DBBN3  
Spec : S3PIN, C6, W/PFC(A), TERMINA  
BLOCK(2PIN), 180', 1500mm  
FSP P/N : 9NA0907704  
Customer P/N : 96PSA-A90W190T-3  
Remark : RoHs Compliant

Item	Contents
01	Spec
02	Drawing





全漢企業股份有限公司  
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# SPECIFICATION

AC Adapter

FSP090-DBBN3

**anticipate IEC 62368-1**

P.E	R/D	APPROVED	REV.
Victor	Arthur	Shipu	1



# Electrical Specification

## Electrical Requirements

### 1. Input Characteristics:

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage:		100Vac~240Vac
1.2 Input Voltage Range:		90Vac to 264Vac
1.3 Input Frequency Range:		47Hz to 63Hz
1.4 Input Current:	100Vac / Full Load(4.74A) 240Vac / Full Load(4.74A)	$\leq 1.5A$ $\leq 0.8A$
1.5 Input Current Harmonic:		IEC61000-3-2
1.6 Efficiency: (Warm up 10 min later)	100Vac / Full Load(4.74A) 240Vac / Full Load(4.74A)	$\geq 87\%$ $\geq 88\%$
1.7 Inrush Current:	100Vac,240Vac / Full load(Cold start)	Shall be less than the rating of Adapter critical component (including rectifiers, fuse surge And current limiting device)
1.8 Meet DoE(Level VI):	(1)115Vac / 0A load (2)115Vac / 25%,50%,75%,100% load (Average Active Mode Efficiency , Warm up 30 minutes later)	$\leq 0.21W$ $\geq 88\%$ ( DC Cable $\leq 1500$ mm,18AWG)
1.9 Meet CoC(Tier 2):	(1)230Vac / 0A load (2)230Vac / 25%,50%,75%,100% load (Average Active Mode Efficiency ,Warm up 30 minutes later)	$\leq 0.15W$ $\geq 89\%$ ( DC Cable $\leq 1500$ mm,18AWG)



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# Electrical Specification

## Electrical Requirements

### 3. Protection Characteristics:

ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection:	When an internal fault occurs, or an external fault is applied to the power supply, such that an overload or short circuit is applied to the output, the power supply shall shut down and enter auto-recovery mode.	Shutdown and no damage
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 shall not exceed 28 volts. Only internal test.	Shutdown and no damage
3.3 Over Current Protection:	When an internal fault occurs, or an external fault is applied to the power supply, such that an overload is applied to the output, the power supply shall shut down and enter auto-recovery mode. at 115Vac & 230Vac & C. C. Mode	Shutdown and no damage  Output current limit : 8.0A(Max)
3.4 Over Temperature Protection:	The power supply will enter into shut down while the abnormal thermal rise occurs. That will be return to normal state by AC reset.	No fire , no smoke

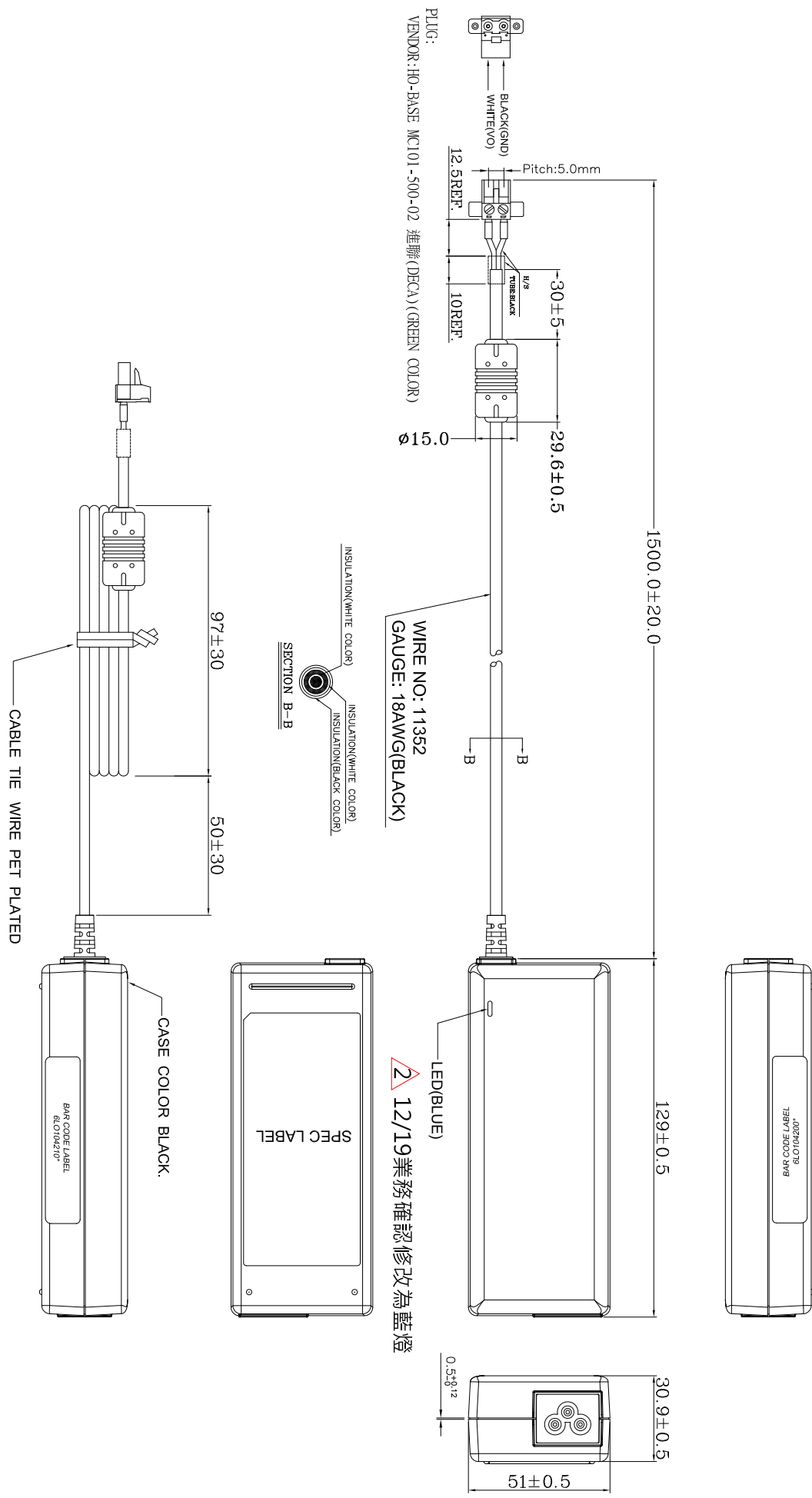
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# Electrical Specification

## Electrical Requirements

### 5. Mechanical Characteristics:

ITEM	CONDITION	SPECIFICATION
5.1 Dimension(Length x Width x Height)		129.0 X 51.0 X 30.9 mm
5.2 Adapter weight		200g (typical)
5.3 Input AC socket Type		IEC 320-C6 Type
5.4 Vibration Test:	(1) Non-operating, $0.01g^2/Hz$ at 5Hz slopping to $0.02g^2/Hz$ at 20Hz, And maintain $0.02g^2/Hz$ from 20Hz ~ 500Hz (2) PSD=3.13grms, 15 minutes/axis (3) Vibration duration : 15minutes (4) Vibrationwaveform : Random (5) Force Direction X,Y,Z	Normal operation shall be continued.
5.5 MTBF:	(1) Full Load (2) 230Vac (3) 25°C	300,000Hrs Min. Telcordia SR-332 Issue2
5.6 SEA Level:		5000 meters
5.7 RoHS:		Meet RoHS required
5.8 Acoustic Noise:	(1) Position the microphone 30 Centimeters above the x-y center Of the AC adapter (2) Input voltage: 110Vac/60Hz 220Vac/50Hz (3) Test Point: No load 20% load 40% load 60% load 80% load Full load	The EUT <30dB



P/N.: 9NA0907704

MODEL NO.: G.P.FSP090-DBBN3(A310001)	TITLE: ASSY	SHEET: 1 OF 1	REV: 02
R&D(5)	PE	DRAWN	DATE
張志敏	Victoryyu	Angelh	DEC.19.2019
INTERIOR COUNTERSIGN:		OD: 00003819	林鴻芸: 彭欣婷: 董麗華

Tolerance for unmark dimension is ± 0.5  
UNIT: mm