



全漢企業股份有限公司

SPI Electronic Co., Ltd.

台灣桃園市建國東路 22 號
TEL : 886-3-375-9888
<http://www.fsp-group.com.tw>

No. 22, Jianguo E. Rd., Taoyuan City,
Taiwan, R.O.C.
FAX : 886-3-375-6966
Email:sales@mail.fsp-group.com.tw

SPECIFICATION



ESD04003422

9NA0251000 FSP025-1AD207A

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ATTACHMENT: ASSY FIGURES

1.0 GENERAL DESCRIPTION AND SCOPE

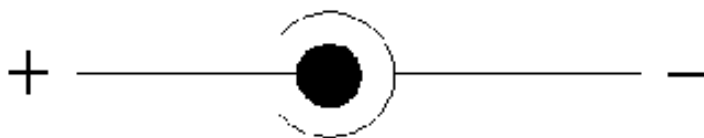
This is the specification of Model FSP025-1AD207A; part no. 9NA0251000, AC-DC adapter switching power supply designed and manufactured by FSP GROUP, INC. located in Taiwan, Republic of China.

The specification below is intended to describe as detailedly as possible the functions and performance of the subject power supply. Any comment or additional requirements to this specification from our customers will be highly appreciated and treated as a new target for us to approach.

2.0 CONNECTOR PIN DESIGNATIONS

The pin designations and color codes are defined as follows:

OUTPUT POLARITY OF DC PLUG



3.0 OUTPUT ELECTRICAL REQUIREMENTS

3.1 OUTPUT RATING

Output	Nominal	Regulation	Ripple/Noise	Min	Max
1	+48.0V	45.6V~50.4V	300mV	0A	0.52A

The total output regulation shall be $\pm 5\%$, including the effects of line voltage variations, load current, ripple and noise, and the AC component of the load current. Ripple and noise measurements shall be made under all specified load conditions through a single Pole low pass filter with 20MHz cutoff frequency. Outputs shall bypass at the connector with a 0.1uF ceramic disk capacitor and a 47uF electrolytic capacitor to simulate system loading.

Ripple Noise test condition: Input at normal line, output at Max. Current.

3.2 SHORT CIRCUIT PROTECTION

Output short circuit is defined to be a short circuit load of less than 0.1 ohm, and with auto-recovery function. Short circuit protection will prevent damages to power supply when output is short-circuited continuously with 100 milliohm or less.

3.3 OVER-CURRENT PROTECTION

No damage.

3.4 TURN-ON DELAY TIME

The turn-on delay from application of AC input power to the establishment of rated DC power voltage should not exceed 3.0 seconds at normal line, output at Max. Current and CC mode test.

3.5 HOLD UP TIME

5mS minimum. Tested at 115Vac input and full load at output.

3.6 OVERSHOOT

The output overshoot at turn-on shall not exceed 10% of normal voltage value with or without the load connected.

4.0. INPUT ELECTRICAL SPECIFICATIONS

4.1 INPUT VOLTAGE RANGE

PARAMETER	MIN.	NOM.	MAX.	UNITS
V-in Range	90	115/230	264	V-rms

4.2 INPUT FREQUENCY

47 - 63Hz

5.3 VIBRATION

The subject power supplies will withstand the following imposed conditions without experiencing non-recoverable failure or deviation from specified output characteristics.

Vibration Storage – Sine wave excited, 1.0 G maximum acceleration, 10-500 Hz, swept at one octave / min. Fifteen minute dwell at all resonant points, where resonance is defined as those

exciting frequencies at which the device under test experiences excursions two times large than non-resonant excursions.

Plane of vibration to be along three mutually perpendicular axes.

5.4 SHOCK

The subject power supplies will withstand the following imposed conditions without experiencing non-recoverable failure or deviation from specified output characteristics.

Storage All 6 sides; 40G, 6 mSec. Half-sine wave pulse in both directions on three mutually perpendicular axes.

Operating All sides except top; 10G, 6 mSec. Half-sine wave pulse in both directions on three mutually perpendicular axes.

6.0. RELIABILITY

6.1. MTBF

The subject adapter have a minimum predicted MTBF(MIL-STD-217F) of 100,000 hours of continuous operation at 25°C, maximum-output load, and nominal AC input voltage.

6.2 DIELECTRIC WITHSTAND VOLTAGE

Primary To Secondary: 3000Vac 10mA for 1 second or 4242 VDC 10mA for 1 second.

6.3 LEAKAGE CURRENT

The measured reading is less than 150uA at 254Vac 50Hz.

6.4 PLD

Follow IEC801-5: L-N 1KV / 1.2* 50uS no function error.

6.5 ELECTROSTATIC DISCHARGE (ESD)

This adapter is capable to withstand ESD test voltage at any point around the enclosure as below, it is refer to IEC1000-4-2

After applied +/- 4kV contact discharge and adapter is no function error.

After applied +/- 8kV air discharge and adapter is no function error.