SILVERSTONE®
Designing Inspiration

Flex ATX SERIES

SST-FX350-G

The reference Flex ATX power supply

Support standard Flex ATX form factor
High efficiency with 80 PLUS Gold certification
350W continuous power output at 40℃ operating temperature rated for 24/7 operation
Class-leading single +12V rail
Support PCIe 6pin connector
Active PFC

SPECIFICATION

Flex ATX Form Factor
SST-FX350-G

350W Switching Power Supply
With Active PFC
80Plus Gold

1.0 INPUT:

1.1 VOLTAGE

MINIMUM	NOMINAL	MAXIMUM	UNITS
90	100~240	264	Vrms

1.2 FREQUENCY

47Hz ~ 63Hz

1.3 CURRENT

115Vac / 5A max. 230Vac / 2.5A max.

1.4 INRUSH CURRENT

No damage

1.5 POWER EFFICIENCY

MEET 80 Plus Bronze at 115/230Vac input.

LOAD	5V	3.3V	+12V	-12V	+5VSB	SPEC
20%	1.53A	1.86A	4.48A	0.05A	0.38A	87%
50%	3.83A	4.66A	11.19A	0.12A	0.96A	90%
100%	7.67A	9.31A	22.38A	0.23A	1.92A	87%

In order to meet Eup* requirements the following quidance must be met for the 5Vsb efficiency at 230V AC.

Load on 5Vsb	2013 Efficiency
< 45mA	AC input power should be <0.5W, including no load
45mA	≥ 50%
100mA	≥ 55%
250mA	≥ 65%
≥ 1A	≥ 75%

1.6 LEAKAGE CURRENT

3.5mA max.

1.7 POWER FACTOR

PF>0.9 at 115/230Vac Full Load

2.0 OUTPUT:

Voltage	+5V	+3.3V	+12V	-12V	+5Vsb
∗① **Max load**	14.0A	17.0A	29.17A	0.3A	2.5A
Min load	0.A	0 A	0A	0.0A	0.0A
Peak load	--	--	--	--	--
∗③ **Regulation**	+3,-3%	+3,-3%	+3,-3%	+10,-10%	+5,-5%
∗② **Ripple & Noise**	50mV	50mV	120mV	120mV	50mV

* ① The continuous total output power is 350W max.
・ The combined power of +5V and +3.3V is 90W max.
* ② Add 0.1uF and 10uF capacitors across output terminal during ripple & noise test.
* ③ LOAD REGULATION TEST TABLE:

	+5V	+3.3V	+12V	-12V	+5Vsb
LOAD1	0.0A	0.0A	0.5A	0.0A	0.0A
LOAD2	5.0A	5.0A	0.0A	0.0A	0.0A
LOAD3	1.53A	1.86A	4.48A	0.05A	0.38A
LOAD4	3.83A	4.66A	11.19A	0.12A	0.96A
LOAD5	7.67A	9.31A	22.38A	0.23A	1.92A
LOAD6	0.0A	0.0A	29.17A	0.0A	0.0A
LOAD7	14.0A	6.0A	20.34A	0.3A	2.5A
LOAD8	6.76A	17.0A	20.34A	0.3A	2.5A

2.1 REMOTE ON/OFF

TTL High/PS-OFF; TTL Low/PS-ON
VIL=0.8Vmax, IIL=-1.6mAmax @Vin=0.4V
VIH=2.0Vmin @Iin=-200uA, VIH=5.25Vmax @open ckt.

2.2 HOLD-UP TIME

10msec (minimum) at 75% of full load at 230/115Vac input.

2.3 POWER GOOD SIGNAL

Singal type +5V TTL compatible.
power good max ripple & noise 400mV pk-pk.

2.4 POWER GOOD

Power good delay time 100-500 msec.

2.5 POWER FAIL DELAY

>1 msec.

2.6 TURN-ON DELAY TIME

2000 msec max.At nominal line full load.

2.7 TRANSIENT OVERSHOOT

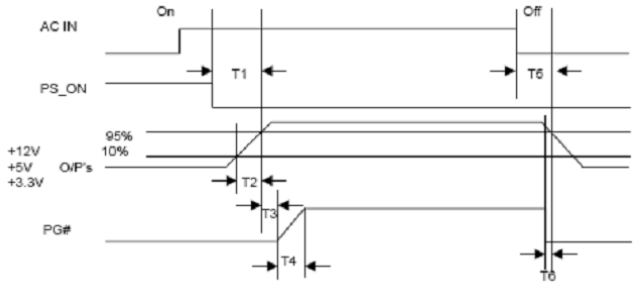
+/-10% max with 30% load change(+12V 40% load chang) on all outputs are 100% of the rated.
Load slew rated 1A/uS and capacitive load as below :

+5V	+3.3V	+12V	-12V	+5Vsb
10000uF	10000uF	10000uF	330uF	10000uF

2.8 RISE TIME

20ms max at full load.

2.9 TIMING WAVEFORMS



T1:Power Turn On Time
T2:Rise Time of the +12V/+5V/+3.3V Output
T3:Pwr_OK Delay
T4: Pwr_OK Rise Time
T5:AC loss to Pwr_OK Hold Up Time
T6:Power_Fail Warning Time

3.0 PROTECTION

When OPP, OVP,OTP or short protection is triggered, the main outputs will be latched off. The main outputs can be reset by cycling the DC remote on/off or AC power. +5Vsb output is auto recovery when fault condition removed.

3.1 OVER POWER PROTECTION

Foldback at 115%~150% over peak load

3.2 OVER VOLTAGE PROTECTION

+3.3V output	5.2 Vmax.
+5.0V output	7.0 Vmax.
+12.0V output	16 Vmax.

3.3 SHORT PROTECTION

All output to GND.

4.0 ENVIRONMENT:

4.1 OPERATING TEMP.	0 ºC to +40 ºC
4.2 STORAGE TEMP.	-20 ºC to +70 ºC
4.3 OPERATING HUMIDITY	20% to 90%,non-condensing
4.4 STORAGE HUMIDITY	5% to 95%, non-condensing
4.5 OPERATING ALTITUDE	0 to 10,000 feet
4.6 STORAGE ALTITUDE	0 to 50,000 feet

5.0 HI-POT:(Input/Output isolation)

5.1 PRIMARY TO SECONDARY

3535Vdc for 3 seconds

5.2 INSULATION RESISTANCE

3535Vdc for 3 seconds

6.0 CE REQUIREMENTS

6.1 CONDUCTED EMI

1. MEET FCC： Class B
2. MEET CISPR 22： Class B
3. MEET BSMI： Class B

6.2 SAFETY STANDARDS

1. MEET CUL (UL 60950)
2. MEET TUV EN60950
3. MEET CB (IEC 60950)
4. MEET CE
5. MEET CCC

6.3 HARMONIC

MEET IEC1000-3-2,Class D

7.0 MTBF at 25°C(demonstrated)

100K hrs minimum

8.0 DIMENSIONS

LxWxH=150 mm x 81.5 mm x 40.5 mm

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