

STR-A6200 Series

PWM, Low EMI, Auto Burst Standby

Low Power Off-line SMPS Primary Switcher

Feature

- **PWM operational frequency jittering**

The frequency jittering function enables cost reduction of EMI noise filtering circuit by suppressing EMI noise.

The center frequency of PWM operation is set to 50 KHz, and the frequency jittering provides variation of ± 2 KHz, which is adjustable by the external capacitor.

- **Over Load Protection with the integrated timer (Auto restart)**

The IC integrates the delay timer circuit to trip the over load protection, which excludes necessity of any external component for that purpose, and enables reductions of both and PCB design area.

- **Over current protection with constant current operation**

Constant output current operation is realized by simply adding two external resistors.

- **Auto burst standby operation**

Reduces standby input less than 100mW at zero load and AC264V

- **Soft start**

Reduces stress to the integrated power MOSFET during startup

- **Less transformer's audible noise during the bust mode operation**

- **Start-up circuit**

Thanks to the proprietary 900V BCD process, the integrated startup circuit, which is connected to the internal MOSFET's drain to power the control circuit, simplifies the peripheral circuit design and improves the system efficiency.

- **Current Mode Feedback Control**

- **Leading Edge Blanking**

Avoids operational malfunctioning resulted by surge current during turn-on period, and eliminates necessity of a surge filtering circuit.

- **Avalanche energy guaranteed MOSFET**

Simplifies a design of surge absorption circuit, and does not require derating to the breakdown voltage.

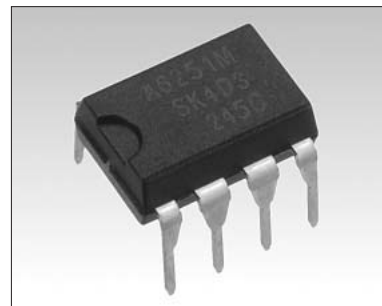
- **Various protections**

Over current protection (OCP) Pulse By Pulse

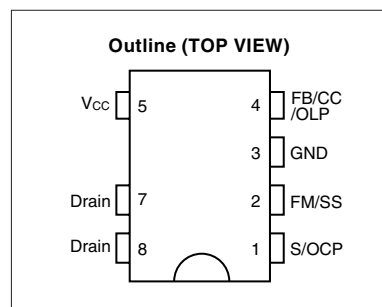
Over load protection (OLP) Auto Restart

Over voltage protection (OVP) Latch

Thermal shut down (TSD) Latch



Package (DIP-8)



Application

- **Battery charger** Cellular phone, Digital camera, Video camera, Electrical shaver, Emergency lighting system, etc.
- **Standby power supply** CRT-TV, Projection-TV, LCD-TV, PDP-TV, Desk Top PC, LBP, Audio system
- **Small power S.M.P.S** Inc jet printer, DVD player/recorder, VCR, CD player, Set top box, Air conditioner, refrigerator, washing machine, dish washer

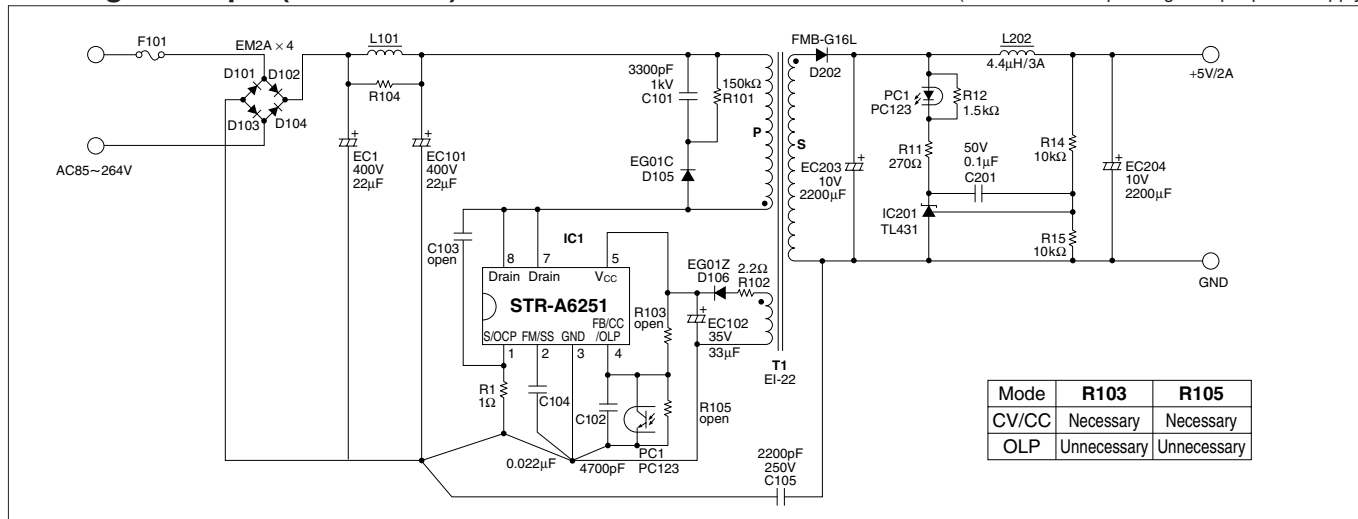
Product Lineup

Part Number	Fosc (kHz)	MOS FET V _{DSS} (V)	R _{DS} (ON) (Ω)	P _{out} 230V Narrow / 85V–264V Wide
STR-A6252	50	650	2.8	24W/20W
STR-A6252M	67			
STR-A6251	50			
STR-A6251M	67	650	3.95	21W/15W
STR-A6259M	67			
STR-A6259H	100			
STR-A6269M	67	800	19.2	10W/6W
STR-A6269H	100			

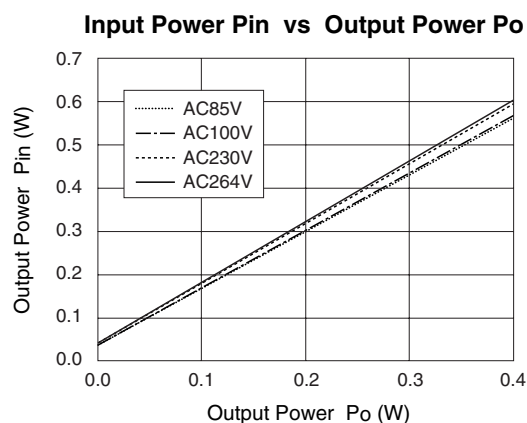
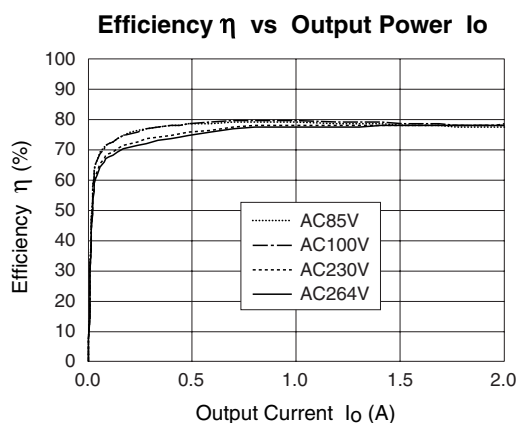
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Design example (STR-A6251)

(10W Universal input-single output power supply)



Electrical Characteristics of the above power supply design



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STR-A6200 series

External Dimensions

