

1-3 ICs for Switching Mode Power Supplies

STR-A6100 Series

■Features

- **PRC [Pulse Ratio Control]: (8 μ s fixed off-time, variable on-time)**

Low-EMI noise operation thanks to the quasi-jittering operation that varies the switching frequency within a range from about 63kHz to 120kHz according to load variations.

- **Auto burst standby: (Power consumption at no load <100mW at AC264V)**

Enables very low power consumption at no load.

Typical results of a 5W universal input power supply: Pin= 35mW at AC110V
Pin=43mW at AC220V

- **Auto bias function**

This function stabilizes operation during Auto Burst Standby mode, by controlling stably the hiccup mode caused by UVLO. The Auto Bias function forces the IC to turn on before the V_{CC} voltage drops down to V_{CC}(OFF), thereby stabilizing the entire power supply operation.

- **Startup circuit**

600V BCD process allows direct connection of the STARTUP pin to the rectified high voltage rail. This reduces component count and improves overall efficiency.

- **Current mode control**

- **Leading edge blanking**

Requires no external Low-pass filter circuit preventing the malfunction due to the surge current at turn-on.

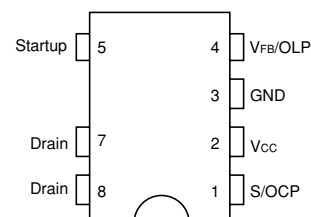
- **Built-in Power MOSFET guaranteeing avalanche energy capability**

Thus, surge absorber circuit can be simplified and also no VDSS derating is required.

- **Versatile protecting functions**

- Over current protection ----- Pulse by pulse
- Over voltage protection ----- With latch
- Overload protection ----- Auto restart
- Thermal shutdown ----- With latch

Pin Assignment (TOP VIEW)



■Applications

- Battery Charger ----- Cell Phone, Digital Still Camera, Camcorder, Shaver, Emergency light, Guidance light, etc.
- Standby Power Supply ----- CRT TV, Projection TV, LCD TV, PDP TV, Desktop PC, LBP, Audio system, etc.
- Compact SMPS ----- Inkjet printer, DVD Player/Recorder, VCR, Set Top Box, etc. (SMPS: Switching Mode Power Supply)
- Auxiliary Power Supply for Controller-- Air conditioner, Refrigerator, Washer, Dish Washer, etc.

■Lineup

Part Number	V _{DS}	R _{DS(ON)}	V _{IN(AC)}	P _{out}
STR-A6131	500V	3.95 Ω	100V/120V	12W
STR-A6132		2.62 Ω	100V/120V	16W
STR-A6153E	650V	1.90 Ω	230V/85V to 264V	24W/20W
STR-A6151		3.95 Ω	230V/85V to 264V	16W/12W
STR-A6159		6.00 Ω	230V/85V to 264V	13W/12W
STR-A6169	800V	19.20 Ω	230V/85V to 264V	8W/5W

