

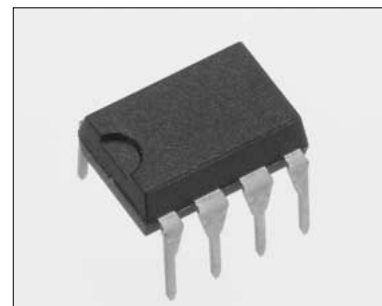
STR-A6100 Series

PRC, Auto Burst Standby, Current-Mode Control

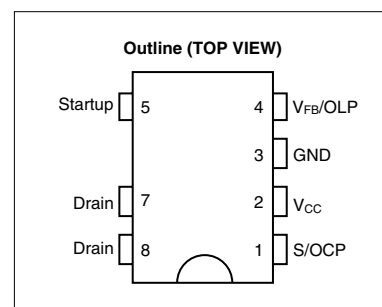
Low Power Off-line SMPS Primary Switcher

Features

- **PRC** [Pulse Ratio Control]: (8 μ s fixed off-time, variable on-time)
The switching frequency varies within an optimum range of 63kHz to 120kHz, according to load variations, to create a quasi-jittering, low-EMI noise operation.
- **Auto burst standby**: (No Load Consumption < 100 mW at AC264V)
Enables very low power consumption at no load.
Typical results of a 5W universal input power supply are 35mW at AC110V and 43mW at AC220V.
- **Auto bias function**
This function stabilizes operation during Auto Burst Standby mode, by preventing a Hiccup mode. The Auto Bias function forces the IC to turn on before the V_{CC} voltage reaches $V_{CC(OFF)}$, thereby stabilizing the entire power supply operation.
- **Integrated 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**
Not required the external Low-pass filter circuit which prevent the malfunction due to the leading edge spike current.
- **Avalanche energy guaranteed MOSFET with high V_{DS}**
The built-in power MOSFET simplifies the surge absorption circuit since the MOSFET guarantees the avalanche energy.
No V_{DS} de-rating is required.
- **Various protecting functions**
 - Over current protection ----- pulse by pulse
 - Over voltage protection ----- with latch
 - Overload protection ----- Auto restart
 - Thermal shutdown ----- with latch



Package (DIP-8)



Applications

Battery Charger ----- Cell Phone, Digital Still Camera, Camcorder, Shaver, Emergency light, Guidance light, and etc.
Standby Power Supply ----- Various TV applications, PC, LBP, Audio system and etc.
S.M.P.S. ----- Ink jet printer, DVD Player/Recorder, VCR, Set Top Box and etc.
Controller Power Supply ----- Air conditioner, Refrigerator, Washer, Dish Washer and etc.

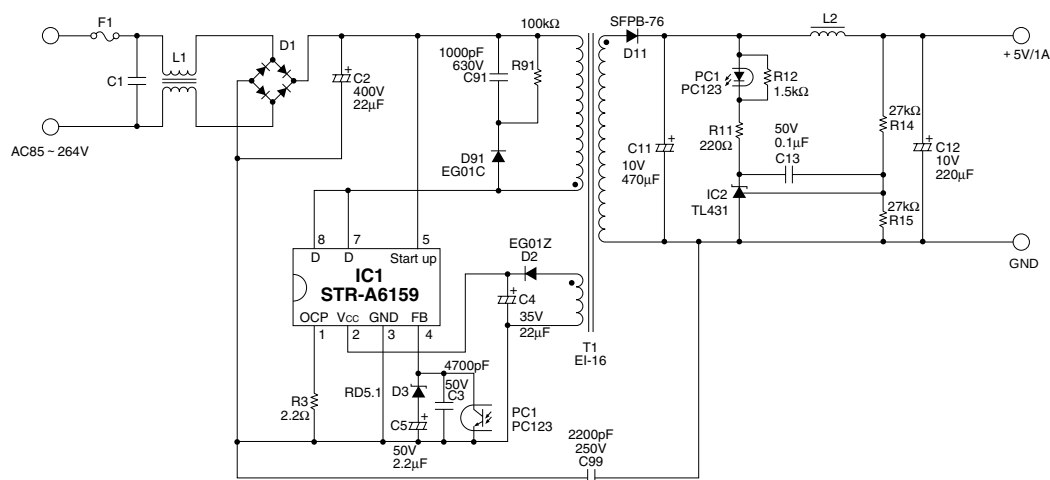
Product Lineup

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 ~ 264V	24W/20W
STR-A6151		3.95 Ω	230V/85V ~ 264V	16W/12W
STR-A6159		6.00 Ω	230V/85V ~ 264V	13W/10W
STR-A6169	800V	19.20 Ω	230V/85V ~ 264V	8W/5W

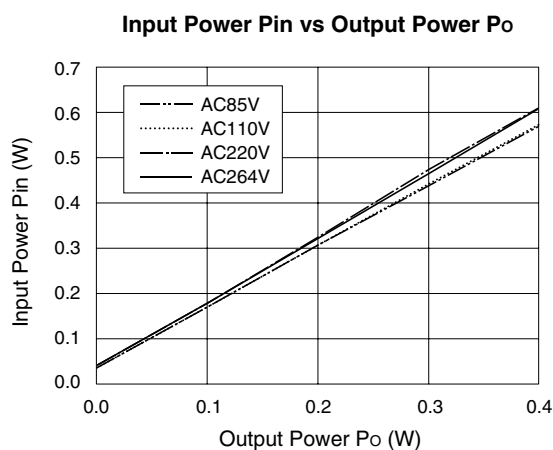
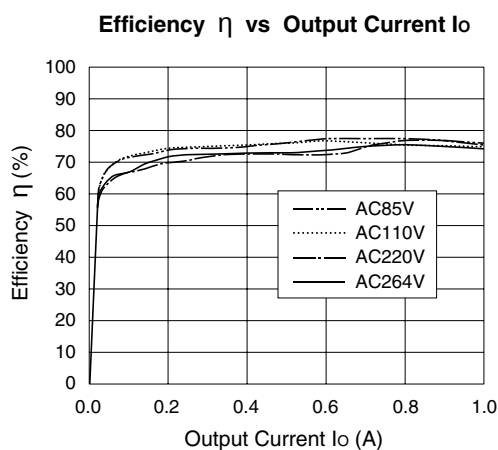
STR-A6100 Series

■ Design example (STR-A6159)

(5W Universal input-single output power supply)



■ Electrical Characteristics of the above power supply design



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