

## STR-W6200D Series

# Power IC for PWM Type Switching Power Supply with Low Noise and Low Standby Power

#### **■** General Descriptions

The STR-W6200D series products are power ICs for switching power supplies, incorporating a power MOSFET and a current-mode type PWM controller IC. The low standby power is accomplished by the automatic switching between the PWM operation in normal operation and the burst-oscillation under light load condition. The product achieves high cost-performance power supply systems with few external components.



TO-220F-6

- **■** Features
  - PWM with Jittering Function

Current-Mode Type PWM Control

The function reduces the EMI noise and enables simplified (low-cost) EMI filters.

The jittering period is adjustable by an external capacitor.

Auto-Standby Function

The burst-oscillation enables the low standby power.

Input Power  $P_{IN} < 100 mW$  at no load

- Built-in Startup Circuit, enabling low power consumption
- Overcurrent Protection (OCP) with Built-in Input Compensation Circuit

The function has less AC input voltage dependency.

- Overload Protection (OLP) with Built-in Delay Timer (the delay time is adjustable by an external capacitor)
- External Latch Protection (ELP)

The function enables the latch shutdown by external signal.

Bias-Assist Function, reducing operating V<sub>CC</sub> voltage drop

The function improves the startup operation and makes a low V<sub>CC</sub> capacitor applicable.

- Leading Edge Blanking Function
- Slope Compensation Function
- Built-in Avalanche Energy Guaranteed High-Voltage Power MOSFET
- Various Protections

Overcurrent Protection (OCP)	Pulse-by-Pulse
Overload Protection (OLP)	Auto-Restart
Overvoltage Protection (OVP)	Latch Shutdown
Thermal Shutdown Protection (TSD)	Latch Shutdown

#### **■** Applications

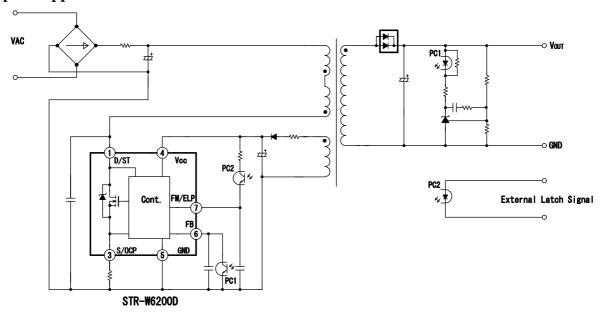
Switching Power Supplies for

Home Appliances (White Goods), Digital Consumer Equipment, OA Equipment, Industry Machines, Communication Devices, Others

#### **■** Product Lineup

Product No.	f <sub>OSC</sub> (kHz)	MOSFET V <sub>DSS</sub> (MIN) (V)	$\begin{array}{c} R_{DS(ON)}(MAX) \\ (\Omega) \end{array}$
STR-W6251D	67	650	3.95
STR-W6252D	67	650	2.8
STR-W6253D	67	650	1.9

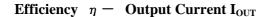
#### **■** Typical Application Circuit

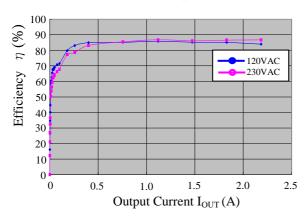


#### **■** Typical Electrical Characteristics

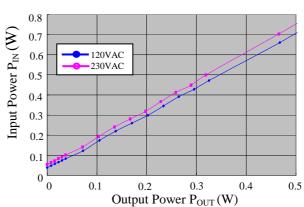
#### **STR-W6251D Power Supply Characteristics**

Input: 85 - 264VAC, P<sub>OUT</sub>: 10W (5V/2A)





### Input Power P<sub>IN</sub> — Output Power P<sub>OUT</sub>



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