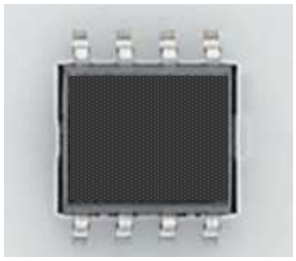
SSC2000 Series

Power Factor Correction (PFC) Controller IC of Continuous Conduction Mode (CCM) type, for High Power-High Efficiency Applications

■ General Descriptions

The SSC2000 series products are power factor correction (PFC) controller ICs of Continuous Conduction Mode (CCM). The product achieves high power CCM systems, with few external components and no multiplier by the average current control method.



SOP-8

■ Features

- Continuous Conduction Mode (CCM)
  The mode enables the low peak current recommended for high power supplies.
- Average Current Control Method
  The method requires no input line voltage sensing and no multiplier,
  and achieves simple systems with few external components.
- Pulse Width Modulation (PWM) + Frequency Modulation Function
  The function superposes the modulated frequency according to Duty value, on the internally fixed PWM frequency of 65 kHz(TYP).
- Maximum Duty Cycle : 94% (TYP)
- Built-in High Speed Response for Dynamic Load Changes
- Error Amplifier Reference Voltage : 3.5V (TYP)
- Brown-In / Brown-Out Function
  The function enables the oscillation start/stop by externally rated input voltage and makes protections at low input voltage.
- Various Protections
  Overvoltage Protection (OVP) ---------- Auto-Restart
  V_{CC} Undervoltage Lockout (UVLO) ---------- Auto-Restart
  Overcurrent Protection (OCP) ---------- Auto-Restart
  Two Overcurrent Detection Thresholds : Input Current Limitation (OCPL)
  Peak Current Limitation (OCPH)
  Output Open Loop Detection (OLD) ---------- Auto-Restart

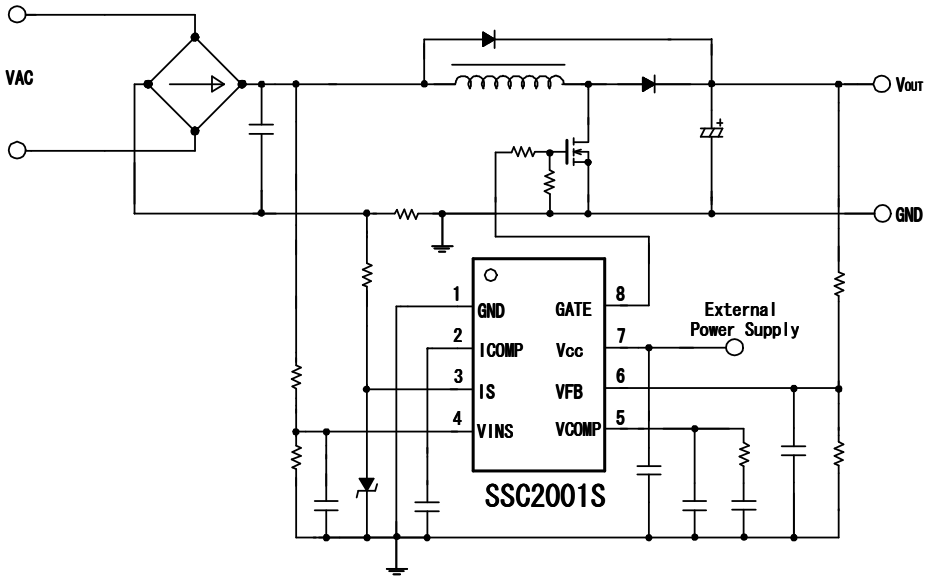
■ Applications

- Power Factor Correction Circuits for Middle to High Output Power Applications
  AC/DC Power Supplies,
  Digital Consumer Equipments; Large Screen LCD-TVs, PDP-TVs, etc.,
  OA Equipments; Computers, Severs, Monitors, etc.,
  Communication Devices, Others

■ Product Lineup

Product No	Package
SSC2001S	SOP8

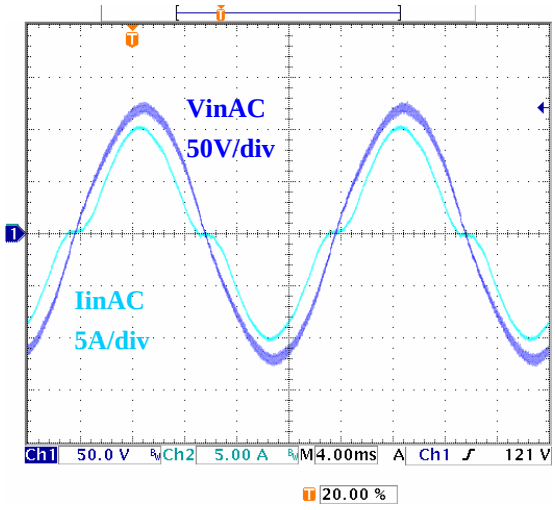
■ Typical Application Circuit



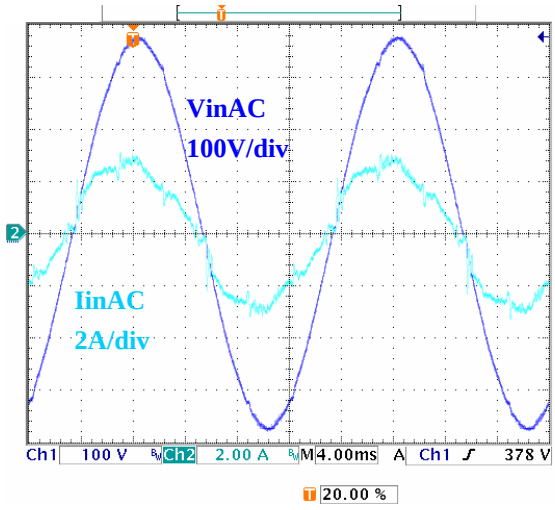
■ Typical Operation Waveforms

Output Power P_{OUT} : 250W (380V, 0.66A)

Input Voltage: 85VAC



Input Voltage: 265VAC



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