

CCM-PFC

ICE2PCS06

ICE2PCS06G

Standalone Power Factor
Correction (PFC) Controller in
Continuous Conduction Mode
(CCM) with Input Brown-Out
Protection

Power Management & Supply

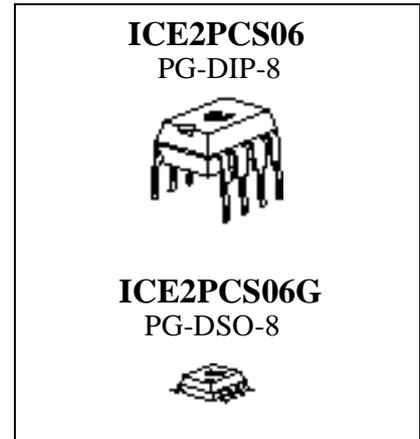


Never stop thinking.

Standalone Power Factor Correction (PFC) Controller in Continuous Conduction Mode (CCM) with Input Brown-Out Protection

Product Highlights

- Leadfree DIP and DSO Package
- Wide Input Range
- Direct sensing, Input Brown-Out Detection
- Optimized for applications which require fast Startup
- Output Power Controllable by External Sense Resistor
- Fast Output Dynamic Response during Load Jumps
- Trimmed, internal fixed Switching Frequency (65kHz)



Features

- Ease of Use with Few External Components
- Supports Wide Input Range
- Average Current Control
- External Current and Voltage Loop Compensation for Greater User Flexibility
- Trimmed internal fixed Switching Frequency (65kHz±5% at 25°C)
- Direct sensing, Input Brown-Out Detection with Hysteresis
- Short Startup(SoftStart) duration
- Max Duty Cycle of 95% (at 25°C)
- Trimmed Internal Reference Voltage (3V±2% at 25°C)
- VCC Under-Voltage Lockout
- Cycle by Cycle Peak Current Limiting
- Output Over-Voltage Protection
- Open Loop Detection
- Soft Overcurrent Protection
- Enhanced Dynamic Response

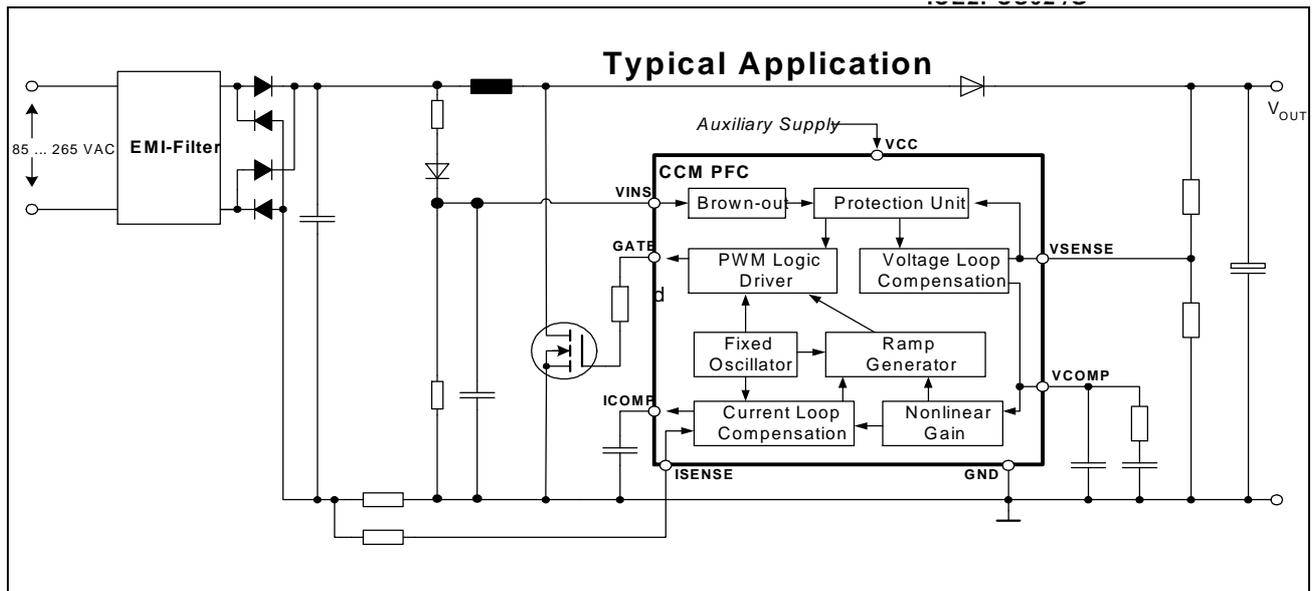
- Fulfills Class D Requirements of IEC 1000-3-2

Description

The ICE2PCS06/G is a 8-pin wide input range controller IC for active power factor correction converters. It is designed for converters in boost topology, and requires few external components. Its power supply is recommended to be provided by an external auxiliary supply which will switch on and off the IC.

The IC operates in the CCM with average current control, and in DCM only under light load condition. The switching frequency is trimmed and fixed internally at 65kHz. Both current and voltage loop compensations are done externally to allow full user control.

There are various protection features incorporated to ensure safe system operation conditions. The internal reference is trimmed (3V±2%) to ensure precise protection and output control level.



Type	Package
ICE2PCS06	PG-DIP-8
ICE2PCS06G	PG-DSO-8

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