

### μPFC ONE CYCLE CONTROL PFC IC

#### Features

- PFC with IR proprietary "One Cycle Control"
- Continuous conduction mode (CCM) boost type PFC
- No line voltage sense required
- Programmable switching frequency (50kHz-200kHz)
- Programmable output overvoltage protection
- Brownout and output undervoltage protection
- Cycle-by-cycle peak current limit
- Soft start
- User initiated micropower "Sleep Mode"
- Open loop protection
- Maximum duty cycle limit of 98%
- User programmable fixed frequency operation
- Min. off time of 150-350ns over freq range
- VCC under voltage lockout
- Internally clamped 13V gate drive
- Fast 1.5A peak gate drive
- Micropower startup (<200 μA)
- Latch immunity and ESD protection
- Parts also available Lead-Free

#### Description

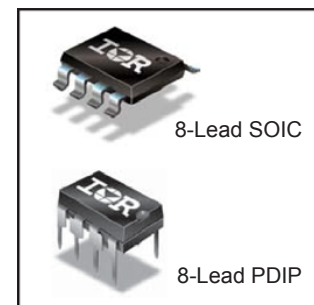
The μPFC IR1150 is a power factor correction (PFC) control IC designed to operate in continuous conduction mode (CCM) over a wide range input line voltages. The IR1150 is based on IR's proprietary "One Cycle Control" (OCC) technique providing a cost effective solution for PFC.

The proprietary control method allows major reductions in component count, PCB area and design time while delivering the same high system performance as traditional solutions.

The IC is fully protected and eliminates the often noise sensitive line voltage sensing requirements of existing solutions.

The IR1150 features include programmable switching frequency, programmable dedicated over voltage protection, soft start, cycle- by-cycle peak current limit, brownout, open loop, UVLO and micropower startup current. In addition, for low standby power requirements (Energy Star, 1W Standby, Blue Angel, etc.), the IC can be driven into sleep mode with total current consumption below 200μA, by pulling the OVP pin below 0.62V.

#### Packages



#### IR1150 Application Diagram

