

Boost/ Flyback μ PFC™ Control IC IRS2500

Features:

- Critical-conduction/ transition/ boundary mode PFC control
- PFC boost or PFC flyback topologies
- No multiplier circuit for noise immune operation
- Over-current protection
- Static and Dynamic DC bus over-voltage protection
- Micro-power startup (30 μ A) and low current (2.5 mA)
- Short minimum on-time allows wide range PFC for universal AC line input
- Low THD
- Open-load over-voltage protection.

Benefits:

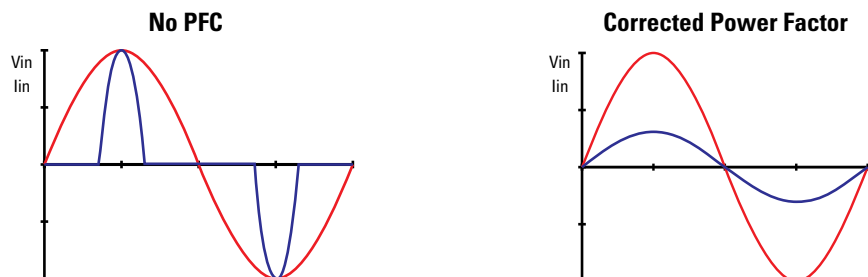
- Boost PFC or Flyback configuration
- Stable operation
- Noise immunity
- Wide operating range

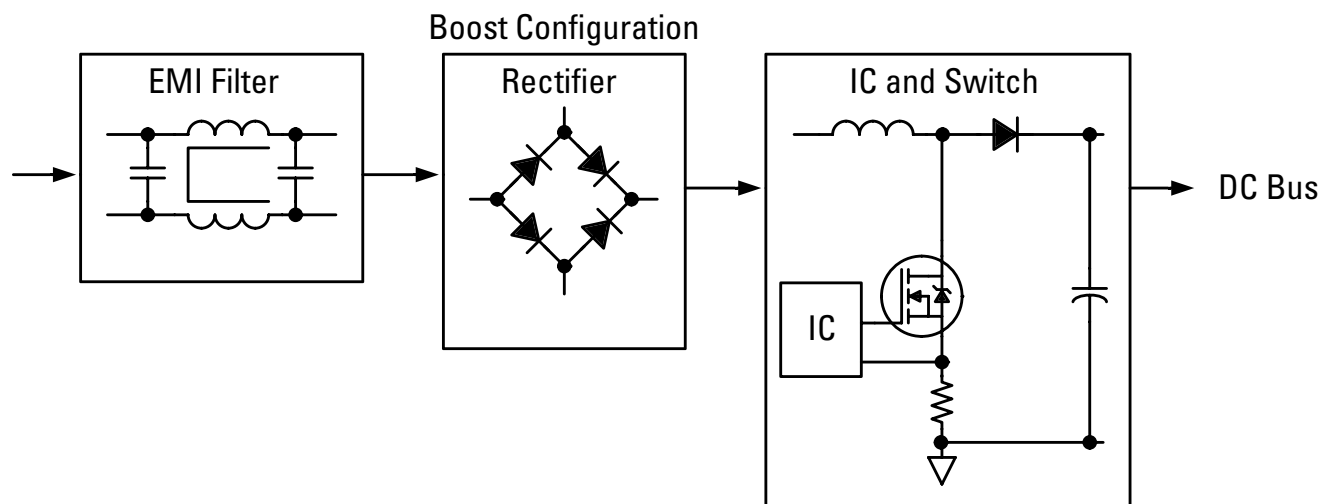
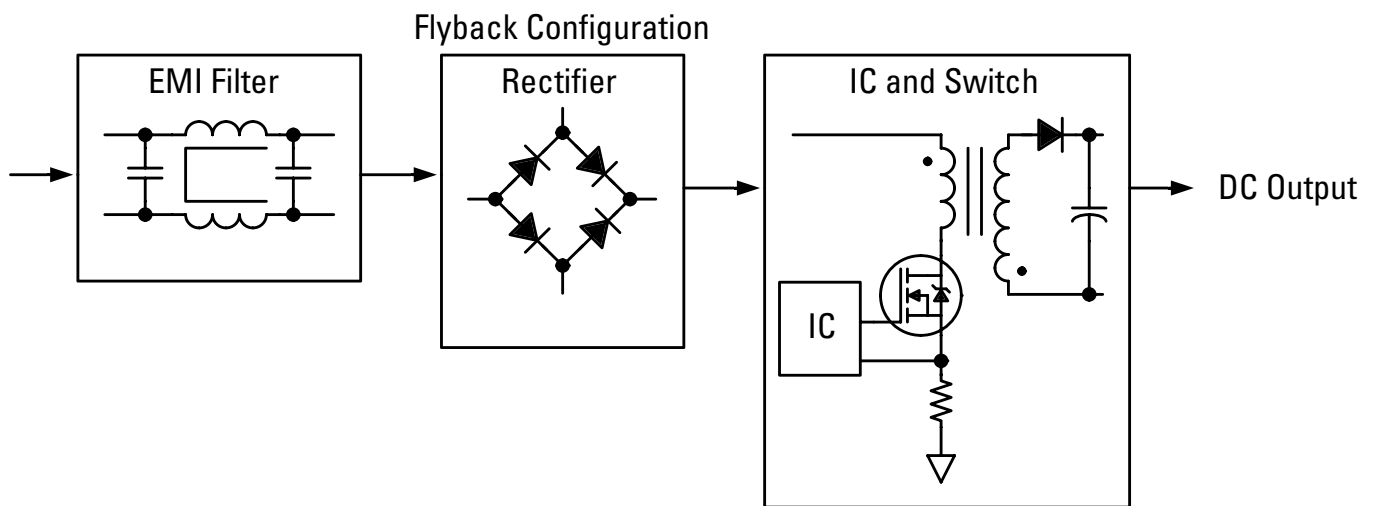
Applications:

- Front-end PFC up to 250W
- Switch mode power supplies
- Constant-current LED supply
- Triac dimmable electronic ballasts



The IRS2500 is a critical conduction mode PFC control IC fully compatible with industry standard parts and a drop-in replacement in most cases. The device is able to operate over a wide input voltage range 90 to 305VAC without exhibiting instability making it ideal for front end power factor correction circuits in applications such as power supplies and electronic ballasts. Enhanced zero crossing detection prevents false triggering by ringing oscillations or noise. Static and dynamic over voltage protection limits overshoot of the output voltage. Cycle by cycle current limit provides protection against overload or inductor saturation. The IRS2500 can also be used in a Flyback converter for a simple one stage power supply with PFC or LED driver.





Part Number	Package	Supply Voltage (V)	Gate Drive Current (mA)	Startup Current (μ A)
IRS2500S	S0-8	12.5 - 20 V	+/- 500 mA	30 μ A