

Enhancing efficiency and enabling reduced dimensions and space conservation for power circuits of household appliances

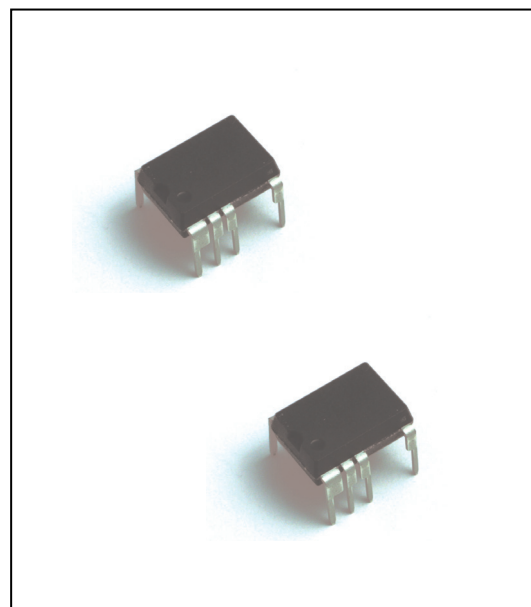
Power Units with Built-in Non-Insulated Power Supply IPD MIP9EXX Series

■ Overview

The MIP9EXX series of power units are modules for non-insulated power supplies, incorporating a switching power MOSFET and its control circuit as well as an output voltage detection circuit. This enables enhanced power supply efficiency and higher power output along with reduced dimensions and space conservation through the use of less components and a smaller package.

■ Feature

- Supports worldwide inputs (80 to 264VAC), achieving high efficiency for no load to rated load.
- Minimized variation of output voltage characteristics depending on the ambient temperatures.
- Built-in thermal protection circuit and DRAIN peak current control function.
- Supports positive and negative polarity outputs as well as multi-outputs.



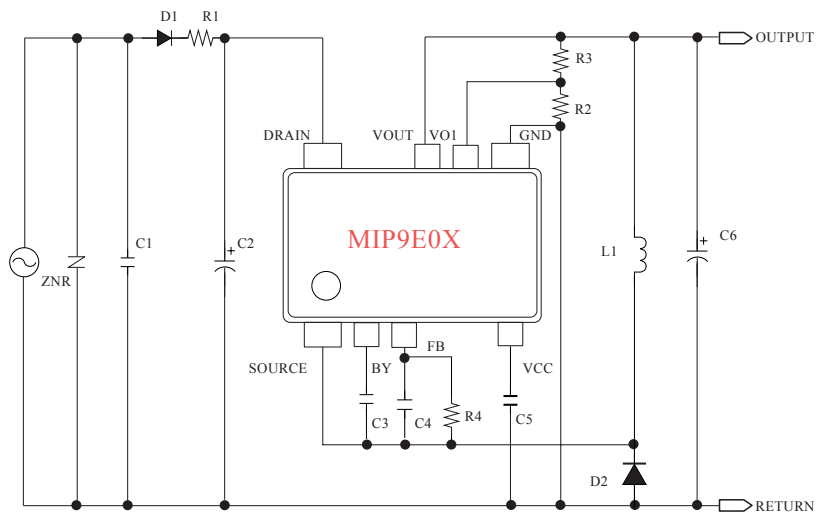
■ Applications

Washing machines, electric carpets, refrigerators, fan motors, vacuum cleaners, rice cookers, water heaters, IH cooking heaters, electric thermos pots and lighting

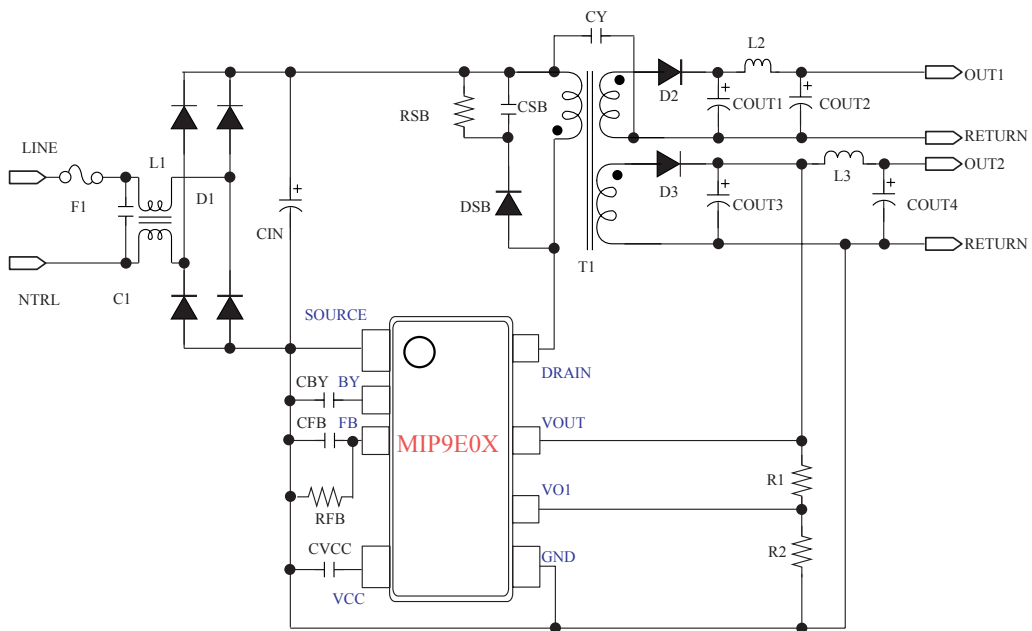
■ Specifications

Type No.	VDSS	Control system	Output power	Package
MIP9E01	≥700V	Intermittent + PWM	15W max.	SDIP10-A1(CF) (DIP-8equivalent)
MIP9E02 (under development)			5W max.	

■ Examples of circuits



A) Drop-voltage chopper-type non-insulated power circuit
(Half-wave rectification/positive output)



B) Transformer-type non-insulated power supply