



## DESCRIPTION

The AP8012 combines a dedicated current mode PWM controller with a high voltage power MOSFET on the same silicon chip.

Typical Power Capability:

Type	SOP8	DIP8
European (195-265 Vac)	8W	13W
US (85-265 Vac)	5 W	8W

The AP8012 is available in SOP8 and DIP8 packages.

## ORDERING INFORMATION

Package Type	Part Number	
SOP8	M8	AP8012M8U
		AP8012M8R
		AP8012M8VU
		AP8012M8VR
DIP8	P8	AP8012P8U
		AP8012P8VU
Note	V: Halogen free Package R: Tape & Reel	
AiT provides all RoHS products Suffix " V " means Halogen free Package		

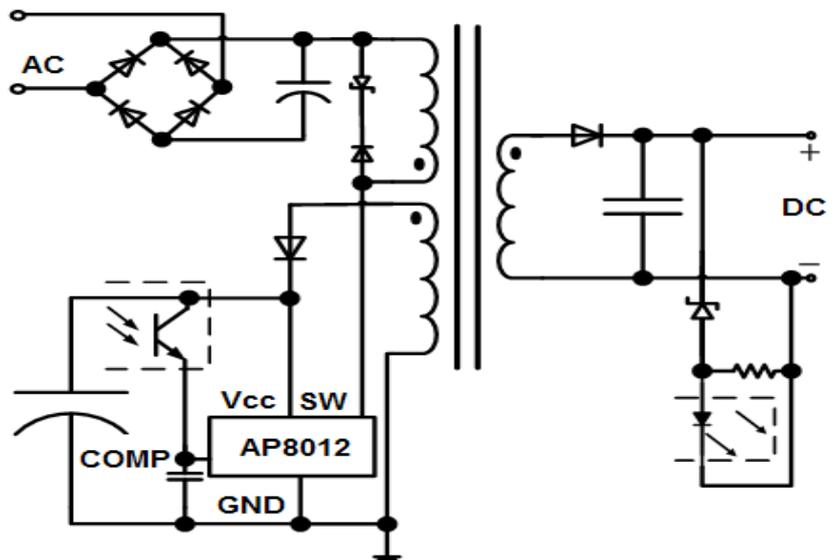
## FEATURES

- 85V to 265V wide range AC voltage input
- A 700V MOSFET on the same silicon chip
- Auto start up with high voltage current source
- PWM with current mode control
- 9V to 38V wide range VCC voltage
- Fixed 60KHz switching frequency
- Automatic skip cycle mode in low load condition.
- Over temperature, over current and over voltage protection
- Auxiliary under voltage lockout with hysteresis
- Available in SOP8 and DIP8 Packages

## APPLICATION

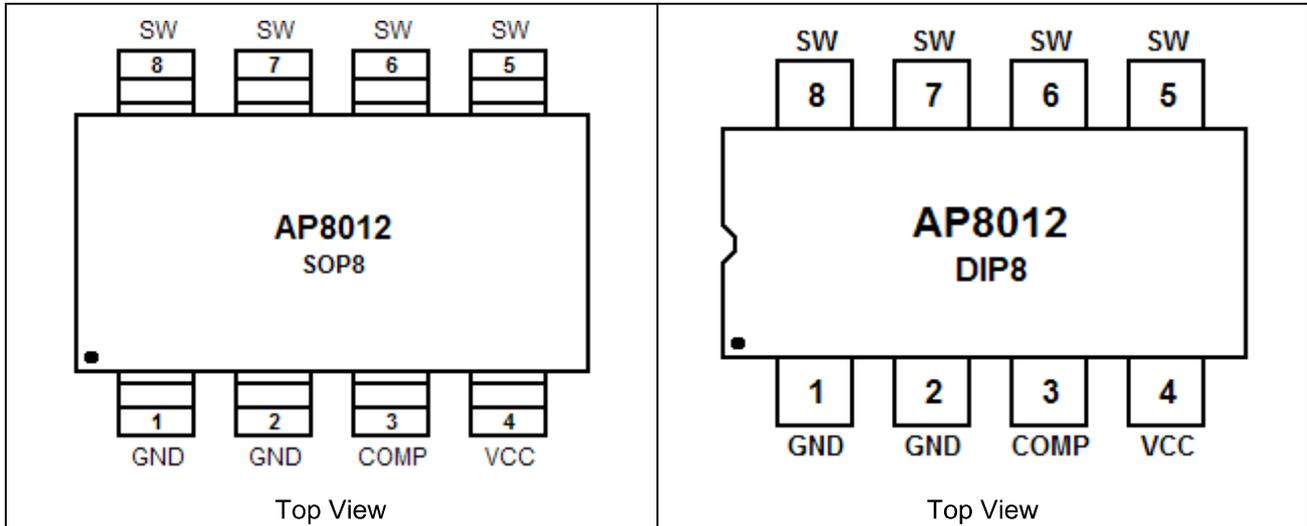
- Power AC/DC Adapters for Chargers
- DVD/VCD power supplies
- Electromagnetic Oven power supplies
- Air Conditioner power supplies
- STB power supplies
- AC/DC LED Driver Applications

## TYPICAL APPLICATION





**PIN DESCRIPTION**



Pin #	Symbol	Function
1,2	GND	Sense FET source terminal on primary side and internal control ground.
3	COMP	Feedback input defines the peak drain MOSFET current.
4	VCC	Positive supply voltage input. Although connected to an auxiliary transformer winding, current is supplied from SW via an internal switch during startup (see Internal Block Diagram section). It is not until VCC reaches them UVLO upper threshold (14.5V) that the internal start-up switch opens and device power is supplied via the auxiliary transformer winding.
5,6,7,8	SW	The SW pin is designed to connect directly to the primary lead of the transformer and is capable of switching a maximum of 700V.