

**LOW POWER PWM SWITCH FOR OFF-LINE SMPS****AP3902****Description**

The AP3902 PWM power switch consists of a fixed-frequency current-mode PWM controller and a high voltage transistor. It is specifically designed for high performance off-line switching power supplies or non-isolated small household applications. Compared to discrete MOSFET and PWM controller power supply solutions, AP3902 solution offers advantages such as fewer component numbers, smaller size, and lower total cost.

In normal operation, the AP3902 features with a fixed switching frequency. When the output power falls below a given level, the circuits automatically switches to a burst mode by skipping some switching cycles. In case of failure modes like open loop, over voltage or overload due to short circuit, the device switches into auto restart mode which is controlled by the internal protection unit.

This IC adopts frequency dithering technique to reduce EMI.

Features

- Built-in NPN Transistor with $700V_{CBO}$
- Current Mode Control with Skip Cycle Capability
- Low Operating Current: 0.45mA
- Fixed Switching Frequency: 60kHz
- Frequency Dithering for Low EMI
- Short Circuit Protection
- Open and Short Circuit Protection for Opto-Coupler
- Maximal Input Power less than 0.2W under no Load
- Output Power Range:
 - 5W to 10W for Adapter with Outer Enclosure
 - 5W to 13W for Open Frame Application

Parametric Table

Fixed Switching Frequency (kHz)	60
Operating Current (μ A)	450
Package	DIP-8

Applications

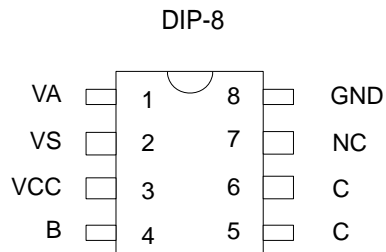
- Induction Cooker
- Set-Top Boxes/DVB
- Adapters
- Auxiliary Power Supplies
- DVD

Benefits

- Fewer Components Solution
- Low Total Cost Solution

Additional Available Materials

- Samples
- Data Sheet
- ESD Report
- Application Note

**LOW POWER PWM SWITCH FOR OFF-LINE SMPS****AP3902****Pin Configuration****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Lead Free	Green	Lead Free	Green	
DIP-8	-40 to 85°C	AP3902P-E1	AP3902P-G1	AP3902P-E1	AP3902P-G1	Tube

Detailed information please refer to the relevant datasheet.

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