BPA8604D
Off-Line Flyback Switcher IC

Description

BPA8604D is a high performance ,highly integrated and low standby power consumption off-line switcher. It's mainly used in household appliances auxiliary power supply，for example microwave ovens and electromagnetic cookers.

BPA8604D is integrated with 700V high voltage power MOSFET, high voltage startup and self-bias power supply and current sampling circuit. Simple pulse number control without external compensation circuit can realize high loop bandwidth and fast dynamic response. The 132kHz switching frequency can effectively reduce the transformer volume and the frequency modulation technology is used to achieve excellent EMI performance. High integration and optimized control techniques greatly reduce the number of peripherals, save system cost and volume, and improve reliability.

Furthermore, the BPA8604D integrates comprehensive protections, including short circuit protection (SCP), over-load protection (OLP), feedback (FB) open loop protection, cycle-by-cycle current limit, and over temperature protection (OTP).

The BPA8604D is available for SOP-7 package. The MOSFET source pins serve as HTSK. This makes it easy to use larger PCB copper for thermal consideration without affecting EMI performance.

SOP-7 package

Features

■ Integrated 700V power MOSFET

■ No-load power consumption <50mW at 230VAC with auxiliary winding, <150mW at 230VAC with self-biasing

■ Excellent transient response, with no output overshoot

■ Integrated high voltage startup and self-bias power supply

■ Frequency jitter for EMI improvement

■ MOSFET source pins serve as HTSK, easy to use larger PCB copper for thermal consideration without affecting EMI performance

■ Comprehensive protections

   ➢ short circuit protection (SCP)

   ➢ Overload protection (OLP)

   ➢ Feedback (FB) open loop protection

   ➢ Cycle-by-cycle current limit

   ➢ Over temperature protection (OTP)

Applications

■ Microwave oven
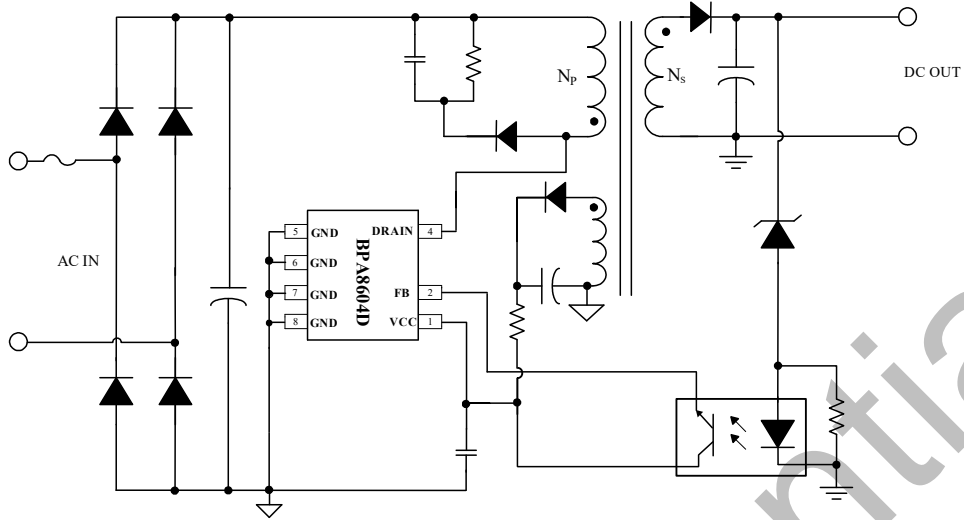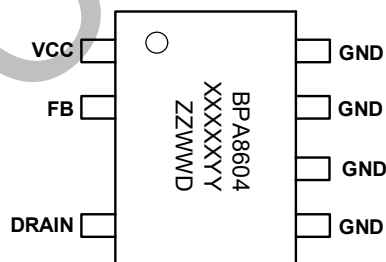
■ Home appliances

Typical Application

Figure 1. Typical application

Ordering Information

Part Number	Package	Packing	Marking
BPA8604D	SOP-7	Tape & Reel 4,000 pcs/Reel	BPA8604 XXXXXYY ZZWWD

Pin Configuration and Marking Information

Figure 2. SOP-7 pin configuration

BPA8604: Part number

XXXXXYY: Lot code

ZZ: Internal code

WW: Week code

D: Package type（D: SOP-7）

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