

GENERAL DESCRIPTION

OB2226 is a high performance, high precision and low cost PWM Power switch for non-isolated buck application. It combines a dedicated current mode PWM controller (with a high voltage power MOSFET with DIP7 package) and built-in error amplifier for low cost and component count. With precise inner resistor divider, precise reference of EA and load compensation, accurate constant voltage regulation at universal AC input can be guaranteed. For high efficiency, oscillator with frequency-reduction control is implemented. And EMI performance is achieved with On-Bright proprietary frequency shuffling technique.

OB2226 offers power on soft start control and protection coverage with auto-recovery features including Cycle-by-Cycle current limiting, over loading protection, output short-circuit protection, over temperature protection, VDD OVP, and UVLO.

OB2226 is offered in SOP8 or DIP7 package.

FEATURES

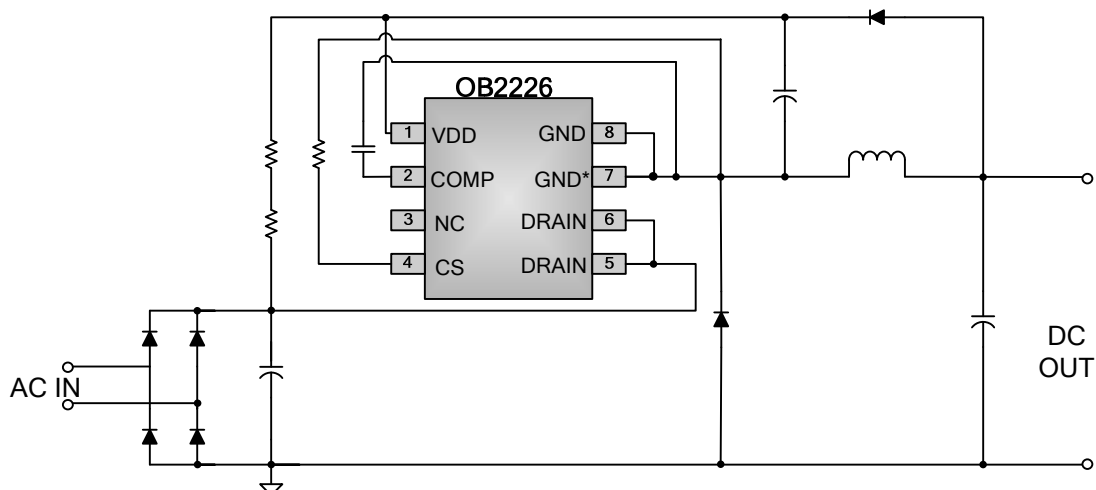
- Low cost and component count buck application
- Built-in error amplifier
- Load compensation
- Oscillator of fixed frequency with frequency-reduction control for high efficiency
- Frequency shuffling for EMI improvement
- Power on Soft-start
- Built-in Leading Edge Blanking (LEB)
- Cycle-by-Cycle Current Limiting
- Over Loading Protection
- Output Short-Circuit Protection
- Over Temperature Protection
- VDD Under Voltage Lockout with Hysteresis (UVLO)
- VDD OVP

APPLICATIONS

Low Power AC/DC offline SMPS for

- Electrical Appliance
- Linear Regulator/RCC Replacement

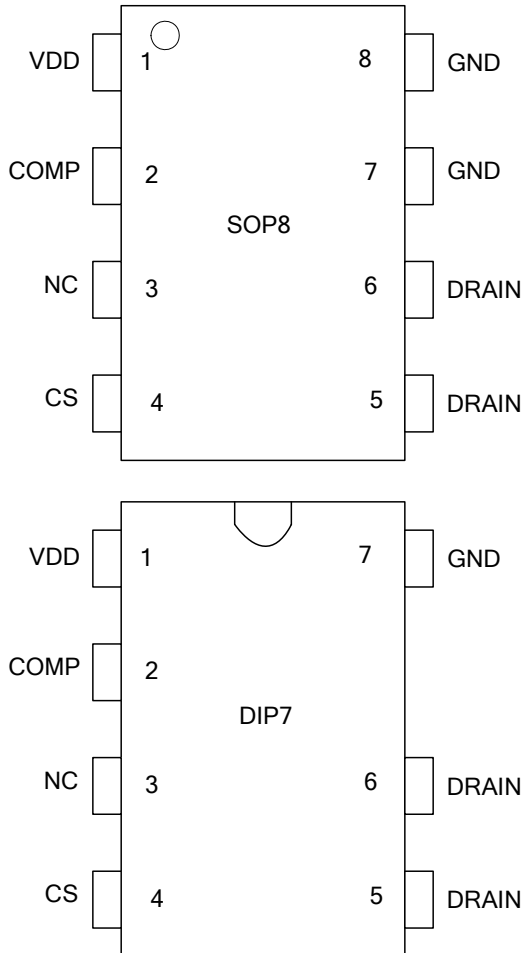
TYPICAL APPLICATION



Note : GND* Only in SOP8 package

GENERAL INFORMATION
Pin Configuration

The pin map is shown as below for SOP8 and DIP7.


Ordering Information

Part Number	Description
OB2226SP	DIP7, Pb-free, Tube
OB2226CP-H	SOP8, Pb-free, Tube
OB2226CPA-H	SOP8, Pb-free, T&R

Package Dissipation Rating

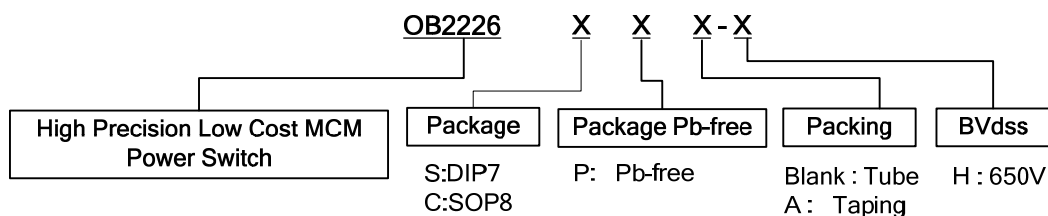
Package	R θ JA (°C/W)
DIP7	75
SOP8	90

Note: Drain Pin Connected 100mm² PCB copper clad.

Absolute Maximum Ratings

Parameter	Value
Drain Voltage (off state)	-0.3V to BVdss
VDD Voltage	-0.3 to 40V
VDD Zener Clamp Continuous Current	10 mA
COMP Voltage	-0.3 to 7V
CS Input Voltage	-0.3 to 7V
Min/Max Operating Junction Temperature T _J	-40 to 150 °C
Min/Max Storage Temperature T _{stg}	-55 to 150 °C
Lead Temperature (Soldering, 10secs)	260 °C

Note: Stresses beyond those listed under “absolute maximum ratings” may cause permanent damage to the device. These are stress ratings only, functional operation of the device at these or any other conditions beyond those indicated under “recommended operating conditions” is not implied. Exposure to absolute maximum-rated conditions for extended periods may affect device reliability.



Marking Information



Y:Year Code
 WW:Week Code(01-52)
 ZZZ:Lot Code
 C:SOP8 Package
 P:Pb-free Package
 S:Internal Code(Optional)



Y:Year Code
 WW:Week Code(01-52)
 ZZZ:Lot Code
 S:DIP7 Package
 P:Pb-free Package
 S:Internal Code(Optional)

TERMINAL ASSIGNMENTS

Pin Num	Pin Name	I/O	Description
1	VDD	P	Power Supply
2	COMP	I	Loop Compensation for CV Stability
3	NC	I	Not connected
4	CS	I	Current sense input
5/6	DRAIN	O	HV MOSFET Drain Pin. The Drain pin is connected to the primary lead of the transformer / inductance.
7/8	GND	P	Ground

OUTPUT POWER TABLE

Product	90~300VAC	90~264VAC
	Buck topology, open frame	Flyback topology, open frame
OB2226SP	6.6W	10W
OB2226CP	4.0W	6.0W