

# CURRENT MODE PWM+PFM CONTROLLER WITH BUILT-IN HIGH VOLTAGE MOSFET

## 1. DESCRIPTION

SD6834 is current mode PWM+PFM controller with built-in high-voltage MOSFET used for SMPS.

It features low standby power and low start current. In standby mode, the circuit enters burst mode to reduce the standby power dissipation.

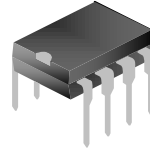
The switch frequency is 25~67kHz decided by the load with jitter frequency for low EMI.

Built-in peak current compensation circuit makes the limit peak current stable even with different input AC voltage. Maximum peak current compensation during power-on reduces pressure on transformer to avoid saturation, the peak current compensation will decrease for balance after power-on. Limit output current can be adjusted through the resistor connected to CS.

It integrates various protections such as undervoltage lockout, overvoltage protection, overload protection, leading edge blanking, primary winding overcurrent protection and thermal shutdown. The circuit will restart until normal if protection occurs.

## 2. FEATURES

- ◆ Energy Star 2.0 standard
- ◆ Lower start-up current (3 $\mu$ A)
- ◆ Various switching frequency following load for the high efficiency
- ◆ EMI Frequency jitter for low EMI
- ◆ Overvoltage, primary winding overcurrent, overload and over temperature protections
- ◆ External peak current sense resistor
- ◆ Undervoltage lockout
- ◆ Built-in high voltage MOSFET
- ◆ Auto restart mode
- ◆ Peak current compensation
- ◆ Maximum peak current compensation for initialization to realize the soft start function.
- ◆ Burst mode
- ◆ Cycle by cycle current limit



DIP-8-300-2.54

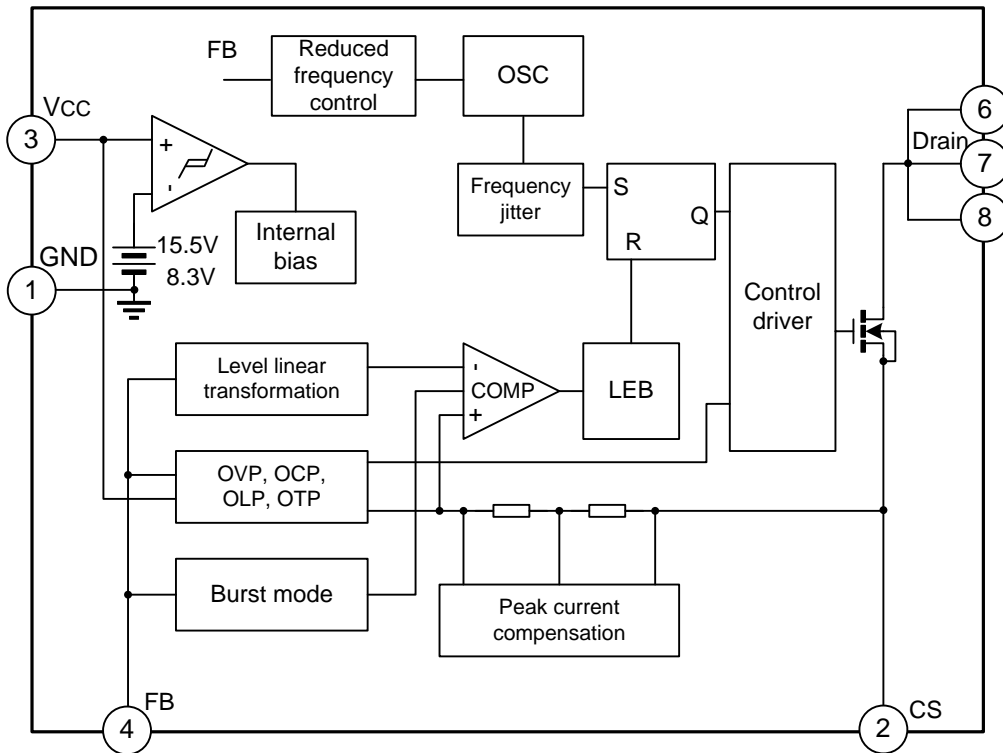
## 3. APPLICATIONS

- ◆ SMPS

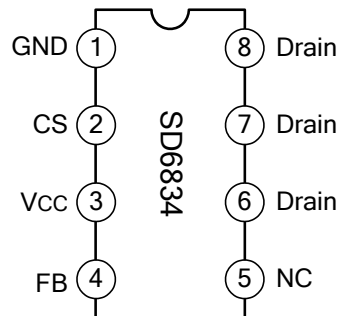
4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD6834	DIP-8-300-2.54	SD6834	Halogen free	Tube

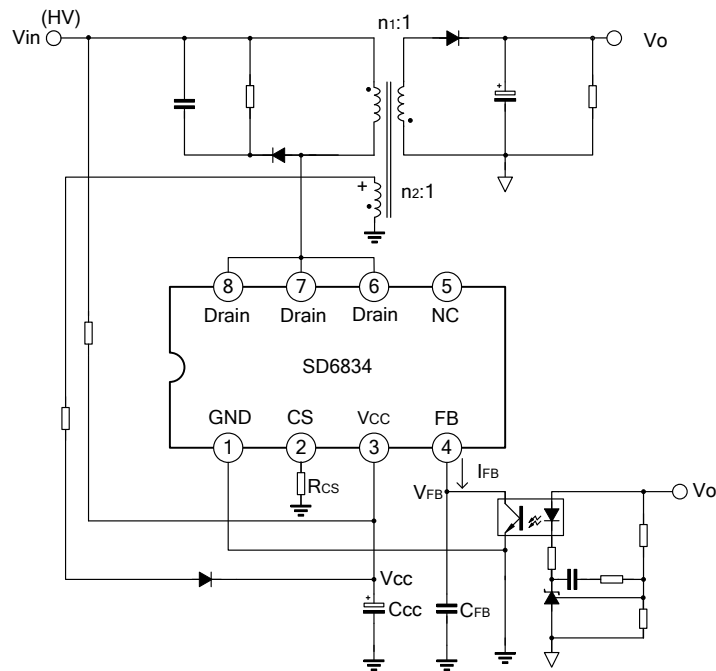
5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7.TYPICAL APPLICATION CIRCUIT



8.PACKAGE OUTLINE

DIP-8-300-2.54 UNIT: mm

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	—	—	4.10
A1	0.50	—	—
A2	2.90	3.30	3.40
b	0.38	0.46	0.55
B1	1.22	1.52	1.82
c	0.20	0.25	0.32
D	9.00	9.40	9.80
E	7.62	7.87	8.26
E1	6.10	6.35	6.60
e	2.54BSC		
eA	7.62BSC		
eB	7.62	—	9.30
eC	0	—	1.52
L	3.00	—	—

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