

DIO8800B

Single Stage Buck PFC Regulator for LED Lighting

Features

- Internal 600V Power MOSFET
- Valley turn-on of the MOSFET to achieve low switching losses
- 0.3V current sense reference voltage leads to a lower sense resistance thus a lower conduction loss
- Low start up current: 15 μ A typical
- Reliable short LED and Open LED protection
- Power factor >0.9
- Compact package: SOIC-8

Applications

- Tube lamp & PAR lamp
- Down light & Bulb lamp

Descriptions

The DIO8800B consists of an integrated single stage Buck && PFC Regulator and 700V power MOSFET, specifically designed for a high performance non-isolated converter with minimal external components targeting at LED lighting applications.

The DIO8800B drives the Buck converter in the quasi-resonant mode to achieve higher efficiency and keeps the Buck converter inconstant on time operation to achieve high power factor.

This chip adopts special design to achieve reliable protection for safety requirement.

Block Diagram

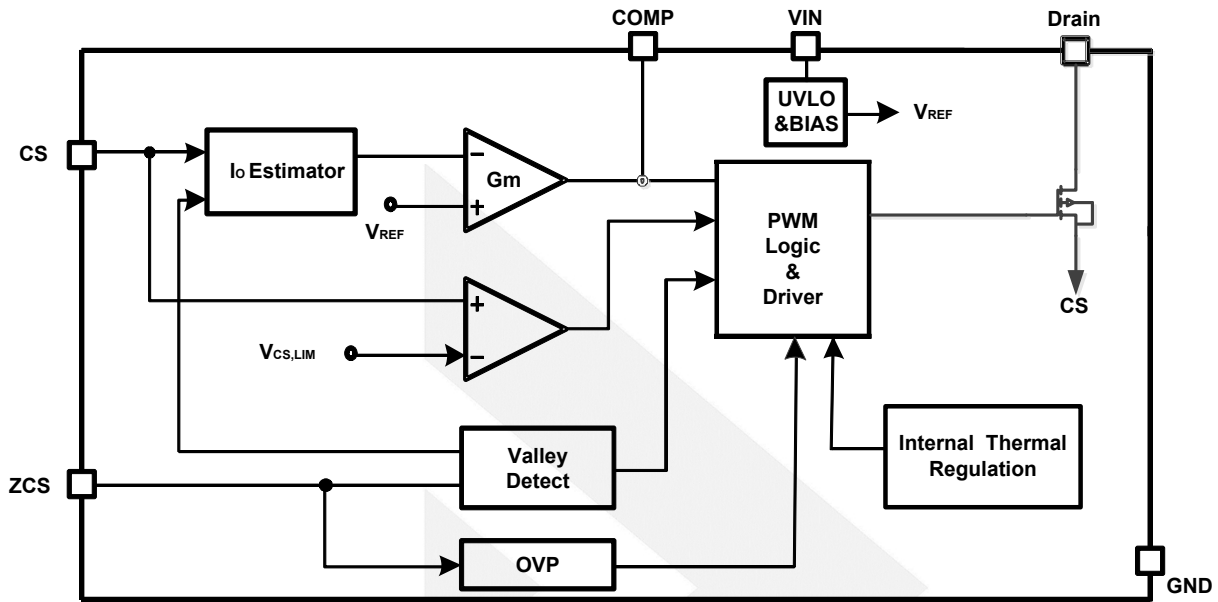


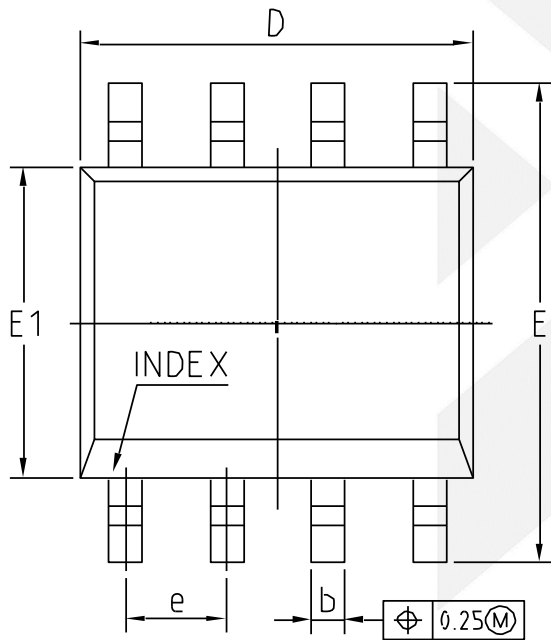
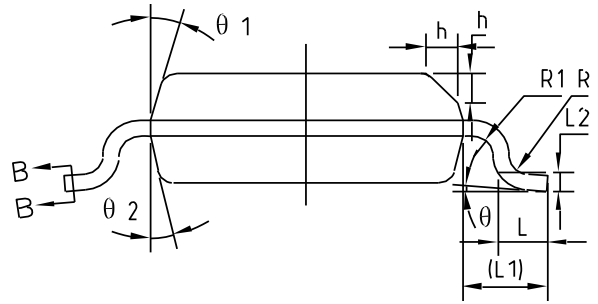
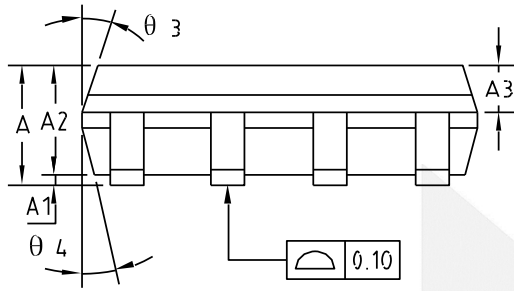
Figure1 Block Diagram

Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO8800BCS8	DIO8800B	Green	-40 to +85°C	SOIC-8	Tape & Reel, 2500



Physical Dimensions: SOIC-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.10	0.15	0.25
A2	1.25	1.40	1.65
A3	0.50	0.60	0.70
b	0.38	-	0.51
b1	0.37	0.42	0.47
c	0.17	-	0.25
c1	0.17	0.20	0.23
D	4.80	4.90	5.00
E	5.80	6.00	6.20
E1	3.80	3.90	4.00
e	1.27BSC		
L	0.40	0.60	0.80
L1	1.04REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
h	0.30	0.40	0.50
θ	0°	-	8°
θ1	15°	17°	19°
θ2	11°	13°	15°
θ3	15°	17°	19°
θ4	11°	13°	15°

