



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 in constant on time operation to achieve high power factor.

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

Block Diagram

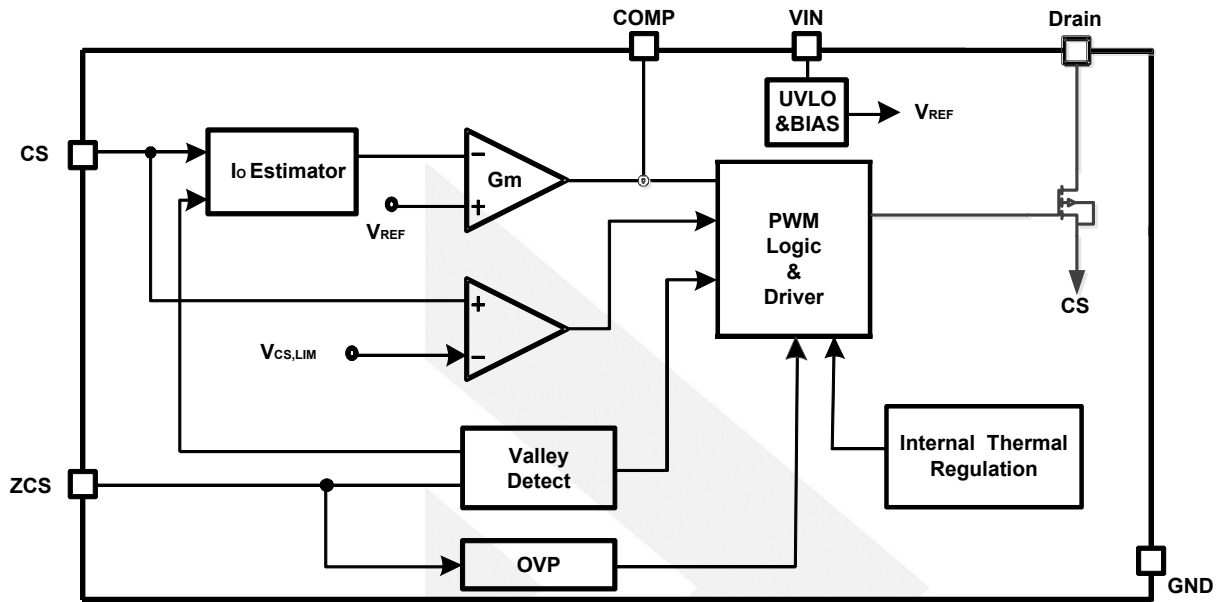
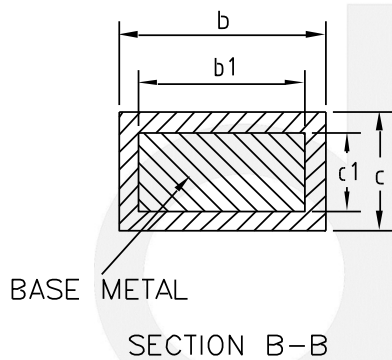
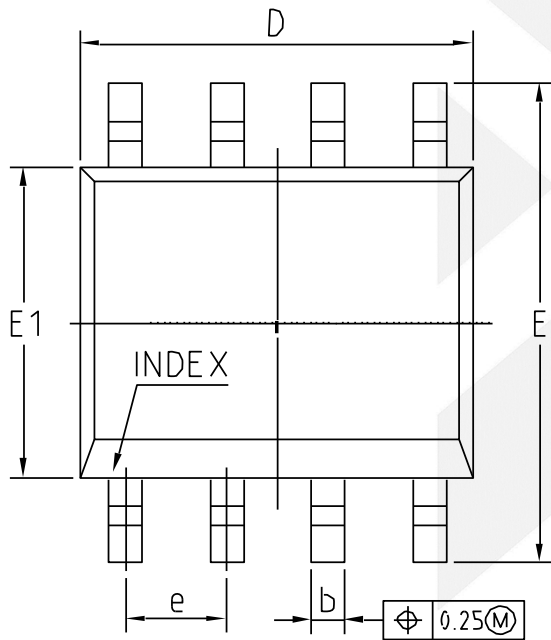
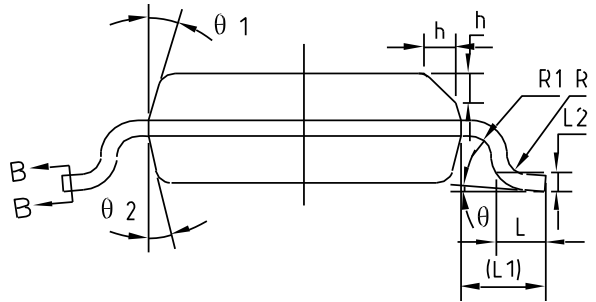
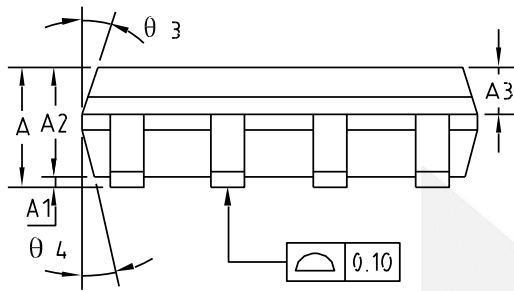


Figure1 Block Diagram

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°

CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipment and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

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DIOO:

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