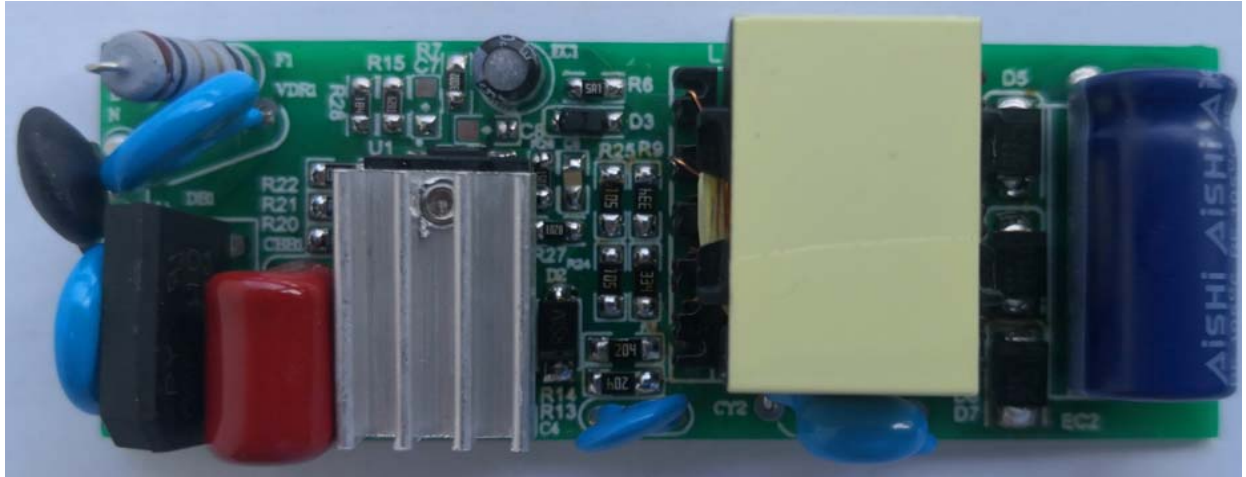


Subject  
**OB3639 Demo Board Manual**

Board Model: LD35V1.4A3639  
Doc. No.: OB\_DOC\_DBM\_A\_363900



**Key features:**

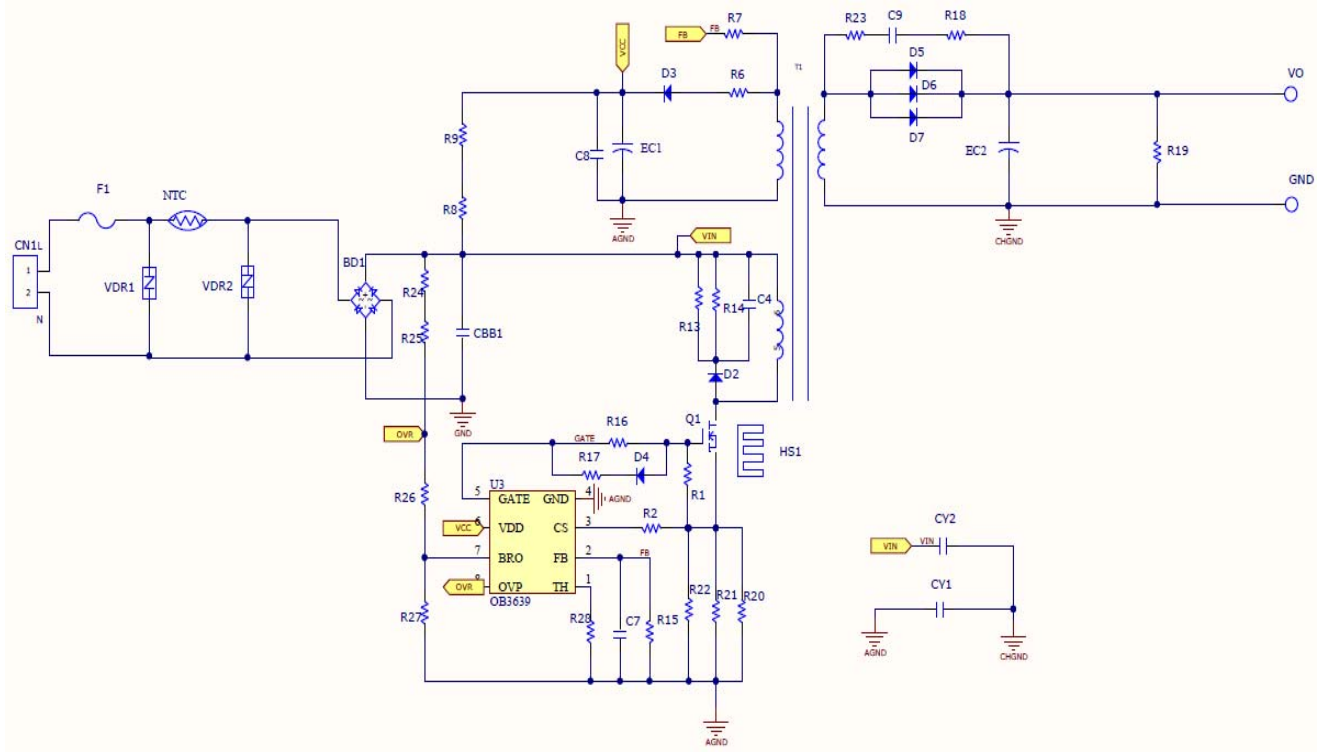
- Primary-side control with single stage PFC for LED driver
- Programmable Vin OVP/ foldback
- Programmable thermal foldback
- Fast startup time 0.485S@100Vac
- Power factor >0.95 and THD<10% @Full load
- Short circuit protection and Open circuit protection
- No visible flicker and audio noise free
- SURGE PASS 3kV differential mode

## Revision History

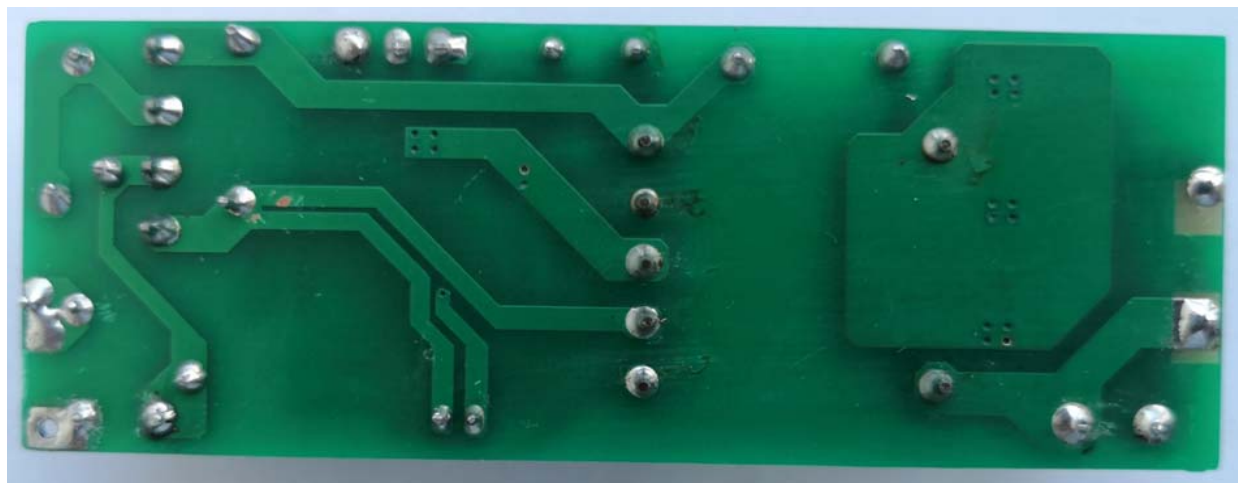
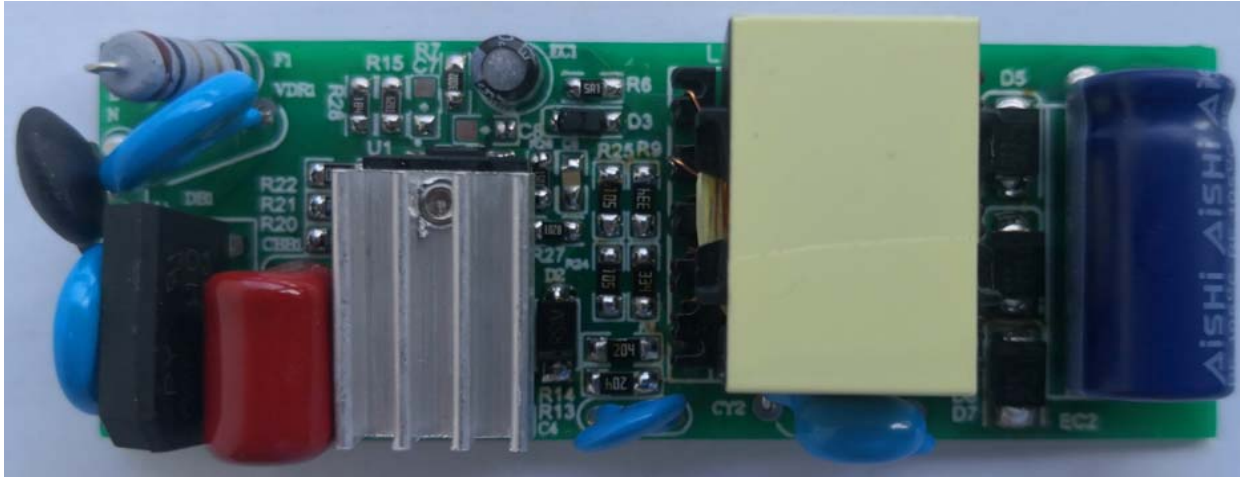
Revise Date	Version	Reason/Issue
2020-10-26	00	First issue

# 1. LED Module Information

## 1.1. Schematic



## 1.2. LED Module Snapshot



**SIZE: 75mm (L) x27.5mm (W) x20mm (H)**

## 2. Performance Evaluation

### Performance Highlights

- Efficiency >87%@230Vac
- Power factor >0.95
- THD<10%
- Turn on delay time<0.5S@170Vac

### Characterization Results Summary

Test Item	Test result
<b>1. Input characteristics</b>	
Efficiency @230Vac	87.8%
<b>2. Output characteristics</b>	
Current overshoot	0%
<b>3. Power factor</b>	
Power factor @230Vac/264Vac	0.987/0.979
<b>4. THD</b>	
THD@230/264Vac	6.1% / 7.8%
<b>5. Time sequence</b>	
Turn on delay time @170Vac	0.35S
<b>6. Protections</b>	
Short Circuit protection	Shut down with auto-recovery
Open Circuit protection	Shut down with auto-recovery
AC input OVP	Gate OFF

**NOTE:** The test data in this report is by full load 35V/1.4A, AC voltage from 90Vac to 264Vac if not otherwise noted.

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