

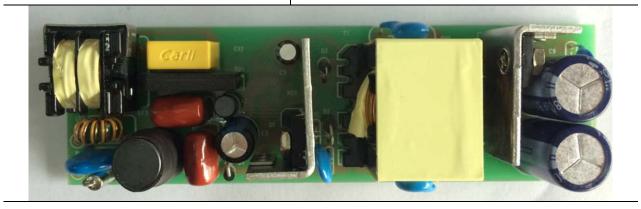
54W LED Driver Using OB3635A

LD36V1.5A3635.00

Subject

OB3635A Demo Board Manual

Board Model: LD36V1.5A3635.00 Doc. No.: OB_DOC_DBM_A_3635A01



Key features:

- Primary-side control with single stage PFC for LED driver
- Fast startup time 0.489S@90Vac
- Power factor >0.95 and THD<10% @Full load
- Short circuit protection and Open circuit protection
- No visible flicker and audio noise free
- Meet EN55015 & FCC Part 15 EMI

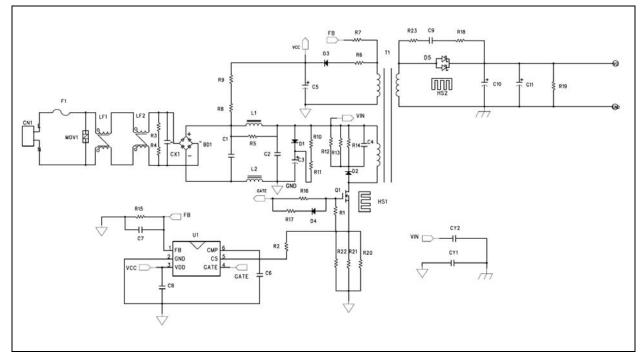
Revision History

Revise Date	Version	Reason/Issue
2016-01-29	00	First issue
2016-03-14	01	AC input voltage range updated to 90Vac ~ 277Vac



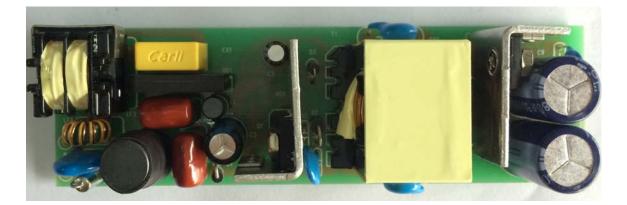
1. LED Module Information

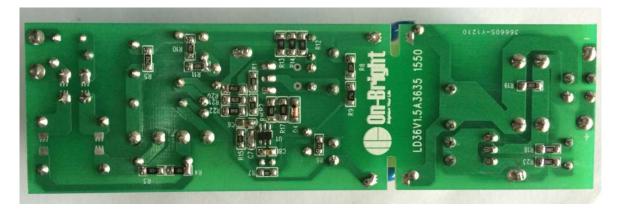
1.1. Schematic





1.2. LED Module Snapshot





SIZE: 120mm (L) x35.5mm (W) x24.5mm (H)



2. Performance Evaluation

Performance Highlights

- Efficiency >88%@115Vac/230Vac
- Power factor >0.95@115Vac/230Vac
- THD<10%@115Vac/230Vac
- Turn on delay time<0.5S@90Vac
- EMI passed EN55015 and FCC PART 15 Class B test with more than 6dB margin.

Characterization Results Summary

Test Item	Test result
1. Input characteristics	
Efficiency @115Vac/230Vac	88.11%/89.15%
2 .Output characteristics	
Current overshoot	0%
3. Power factor	
Power factor @115Vac/230Vac	0.998/0.976
4. THD	
THD@115Vac/230Vac	3%/6.6%
5. Time sequence	
Turn on delay time @90Vac	0.489S
6. Protections	
Short Circuit protection	Shut down with auto-recovery
Open Circuit protection	Shut down with auto-recovery

NOTE: The test data in this report is by full load 36V/1.5A, AC voltage from 90Vac to 277Vac if not otherwise noted.

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