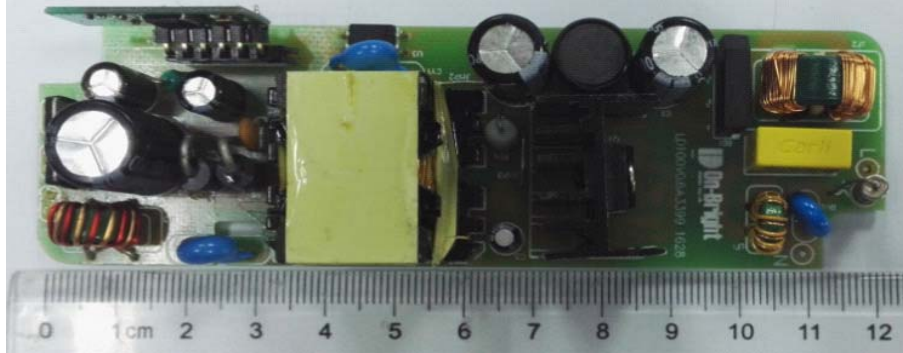


**Subject**

**2.4G Dimmable 60W LED Lighting Demo Board Manual**

Board Model: LD100V0.6A3399.1637

Doc. No.: OB\_DOC\_DBM\_3399+2100+6122L03



120mm (L) \*38mm (W) \*23mm (H)

**Key Features**

- 2.4G color temperature and brightness adjustable for two-channel LED lighting application
- Isolated and primary-side constant current controller with  $\pm 5\%$  current regulation
- Fast startup time 570mS@ 176Vac and low standby power 0.47W@ 264Vac
- Wide dimming range from 2% to 100%
- Open circuit protection
- No visible flicker
- EMI Meet EN55015

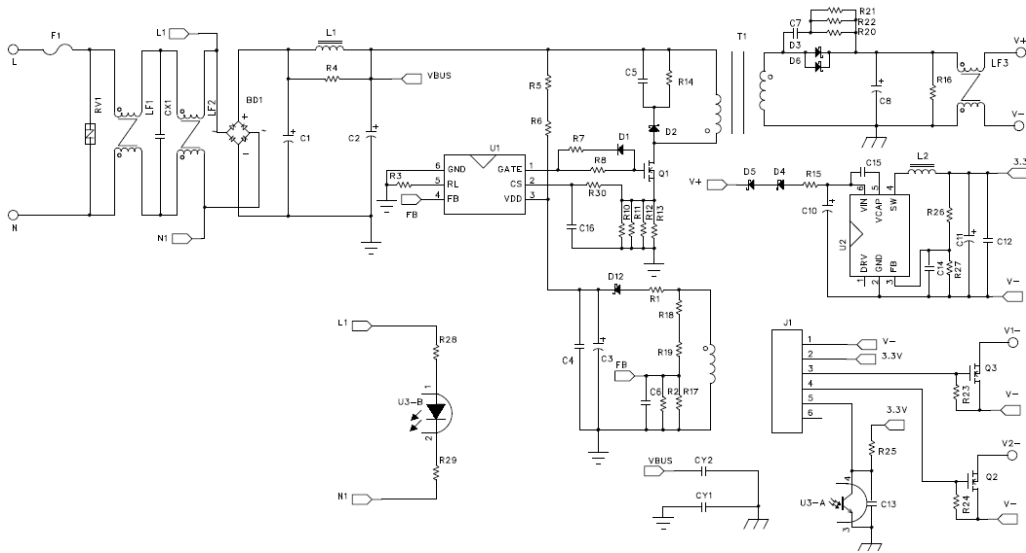
Note: The test data in this report is by 32 Series 2 Parallel 1W LED array, AC voltage from 176Vac to 264Vac, 100% dimming duty if not otherwise noted.

**Revision History**

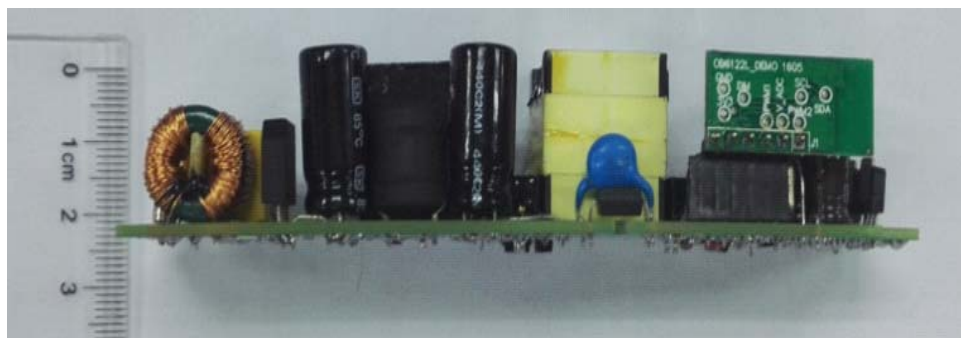
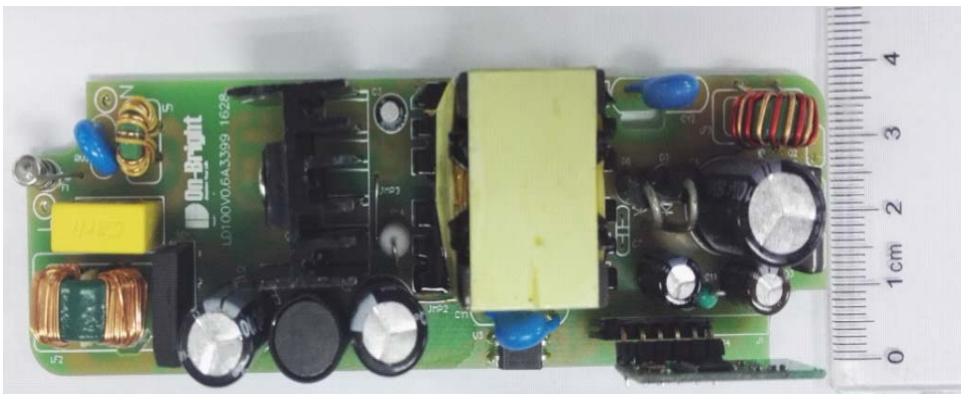
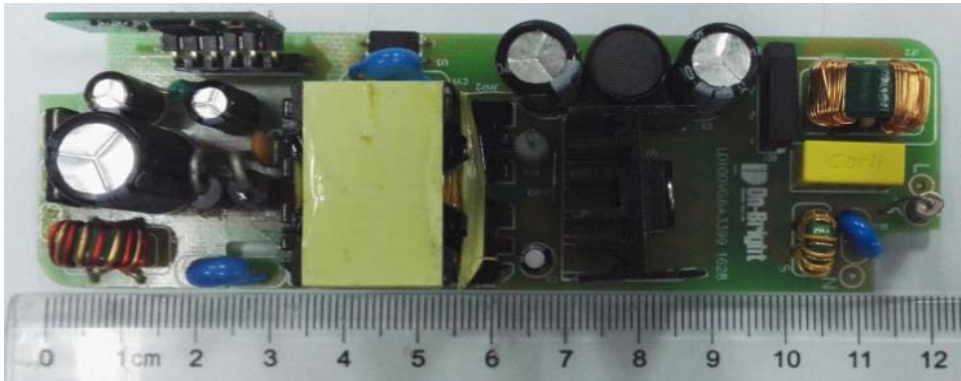
Revise Date	Version	Reason/Issue
2016-06-12	00	First issue
2016-08-03	01	Changed LDO to OB2100
2016-09-29	02	Updated BOM
2017-08-01	03	Changed Q2 and Q3 model, add zener D5.

## 1 LED Lighting Information

### 2.1 Schematic



### 2.2 Module Snapshot



## 2 Performance Evaluation

### *Performance Highlights*

- Standby power under 500mW@264VAC
- Efficiency more than 88%@230VAC
- Startup time <0.6s
- EMI passed EN55015 test with more than 6dB margin.

### *Characterization Results Summary*

Test Item	Test result
<b>1. Input characteristics</b>	
Standby power @230Vac	0.41W
Efficiency @230Vac	89.34%
<b>2 .Output characteristics</b>	
Current overshoot	0%
<b>3. Time sequence</b>	
Turn on delay time @176Vac	570ms
<b>4. Protections</b>	
Open Circuit protection	OK

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