Fairchild Reference Design

The following reference design supports inclusion of FL7701 in design of LED illumination. It should be used in conjunction with the FL7701 datasheet as well as Fairchild's application notes and technical support team. Please visit Fairchild's website at http://www.fairchildsemi.com.

Application	Fairchild Device	Input Voltage Range	Rated Output Power	Output Voltage (Rated Current)
LED Illumination	FL7701	187-264V_{AC}	7.55W	31.56V (0.26A)

Key Features

- Digital Implemented Active PFC Function
- Built in HV Supplying Circuit: Self Biasing
- AOCP Function with auto restart Mode
- Cycle-by-Cycle Current Limit
- Current Sense Pin Open Protection
- Low Operating Current: 0.85mA (Typical)
- Programmable Oscillation Frequency
- Programmable LED Current
- Analog Dimming Function

1. Schematics

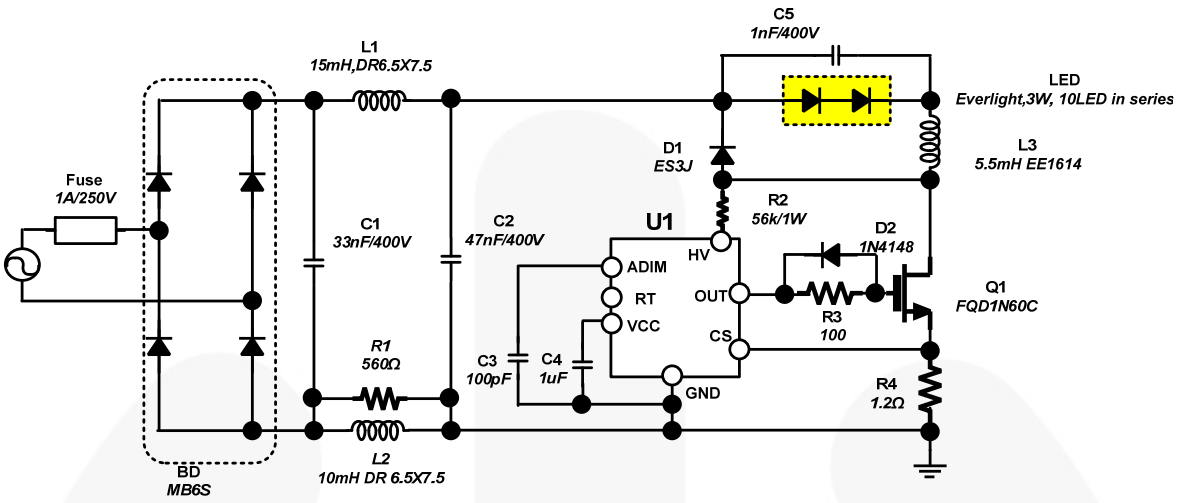

Figure 1. Schematic

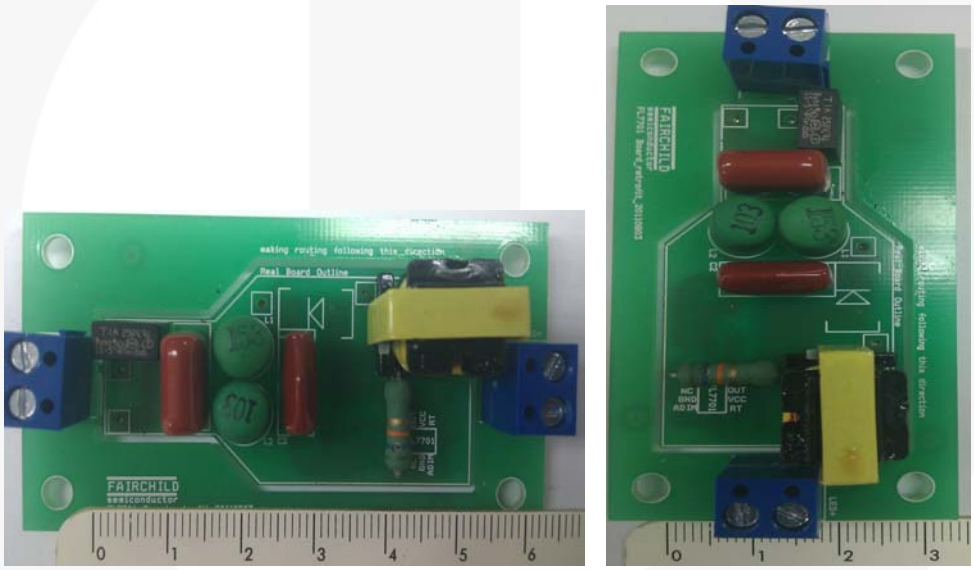

Figure 2. Real Board Size with Input / Output Connectors

2. Performance

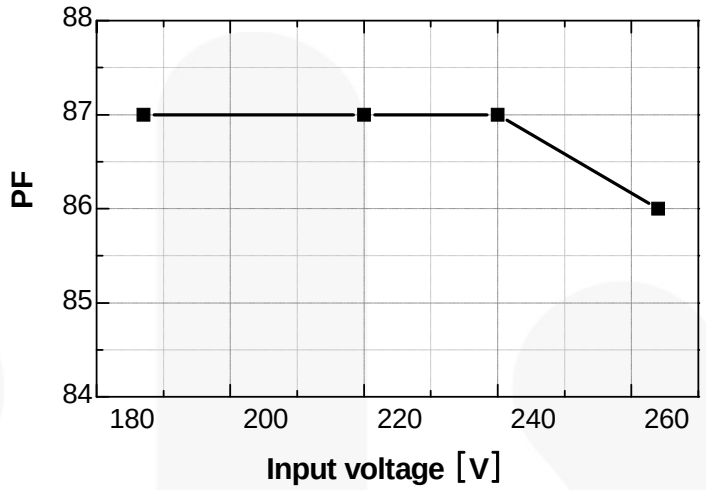

Figure 3. Efficiency vs. Input Voltage

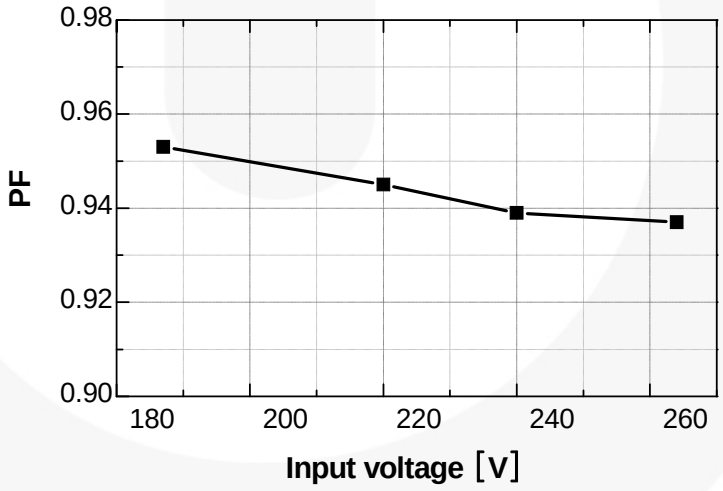

Figure 4. Power Factor vs. Input Voltage

3. Related Resources

FL7701 — Smart LED Lamp Driver IC with PFC Function

http://www.fairchildsemi.com/support/referencedesign