Circuit Description

This circuit description is fixed to LR1A15/F/B/RP, LR1A15/F/G/RP, LR1A15/F/Y/RP, LR1A15/F/R/RP, LR1A15/F/W/RP, LR1A/F/B/RP, LR1A/F/G/RP, LR1A/F/Y/RP, LR1A/F/R/RP, LR1B10/F/B/RP, LR1B10/F/G/RP, LR1B10/F/Y/RP, LR1B10/F/R/RP.

The circuit of this unit is consisted of AC/DC transfer circuit, switching circuit, buck-boost circuit, protection circuit and LED.

AC/DC transfer circuit: It comprises D1, D2, L1 and C3, C4. Inductor L1 could reduce high frequency noise and interference which were from power supplier and this ballast. In the AC/DC transfer circuit, the 120VAC input is rectified by the diodes D1, D2 and the capacitors C3, C4 into DC voltage.

Switching circuit: It comprises some circuit within IC1, its' frequency is about 28 kHz

Buck-boost circuit: It comprises IC1, L2, R2~R5, D3, C1, C2, and C5. This unit transfers the DC voltage into one other DC voltage that is suitable for driving LED.

Protection circuit: It comprises D4 and D6. It feedbacks signal to IC1 when the LED become disconnected or burned down, so no danger will occur under this kind of situation.

LED: The LED will consume the power and make light.