

Circuit Description

This circuit description is fixed to LR1G30/F/B/RP, LR1G30/F/G/RP, LR1G30/F/Y/RP, LR1G30/F/R/RP

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

AC/DC transfer circuit: It comprises D1, 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 and the capacitors C3, C4 into DC voltage.

Switching circuit: It comprises some circuit within IC1, its' frequency is about 35 kHz

Buck-boost circuit: It comprises IC1, L2, R2~R5, D2, R6 and C1, C2, C5. This unit transfers the DC voltage into one other DC voltage that is suitable for driving LEDs.

Protection circuit: It comprises D3 and D4. It feedbacks signal to IC1 when the LED become disconnected or burned down, so no danger will occur under such kind of situation.

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