Active Load for Dimming

Description

- The driver circuit provides the output current I_O, however the minimum value of the output current I_O may not achieve the desired amount of dimming
- An active load is coupled to the output of a driver circuit and provides an active load current I_{AL} to achieve a desired amount of dimming by reducing the current I_{LD} provided to the load of the lighting driver

Benefits

- Achieves full dimming of the lighting driver load, in particular with drivers where the output current I_O does not fall below a minimum value which achieves the desired amount of dimming
- **Could be used with:** lighting drivers

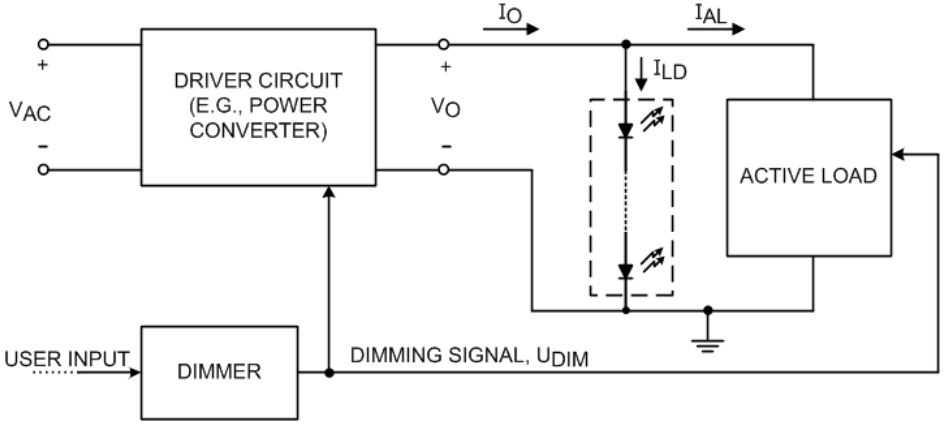

Figure 1. Lighting system including an active load circuit

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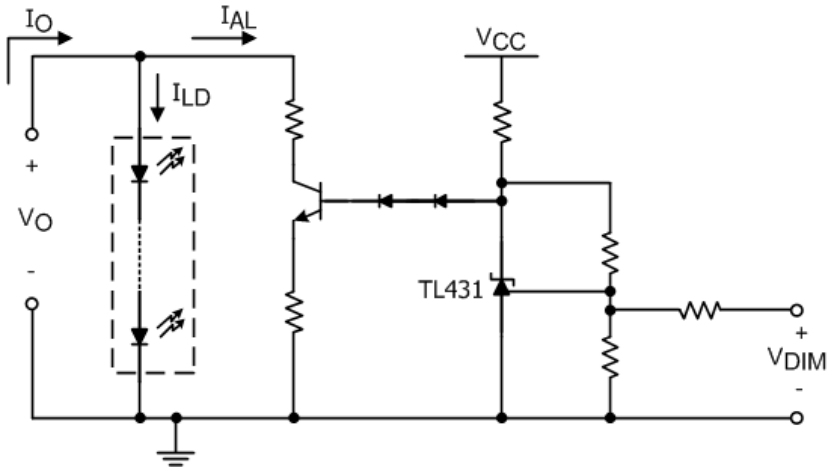

Figure 2. Example active load circuit with the dimming signal represented as voltage V_{DIM} which decreases with increased dimming

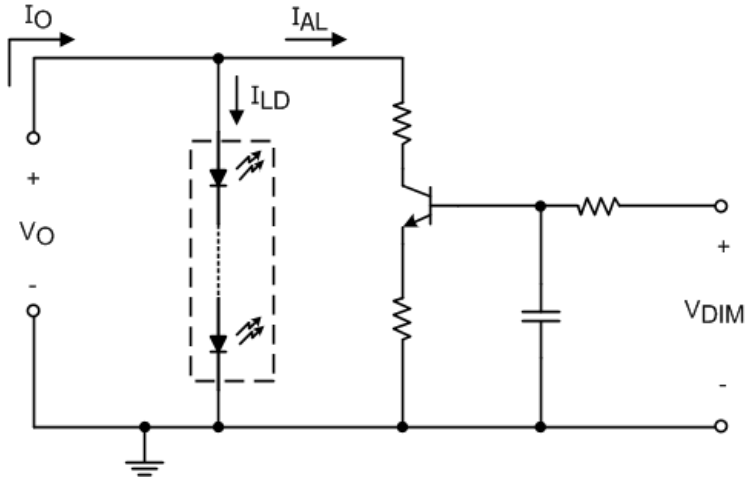

Figure 3. Example active load circuit with the dimming signal represented as voltage V_{DIM} which increases with increased dimming

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