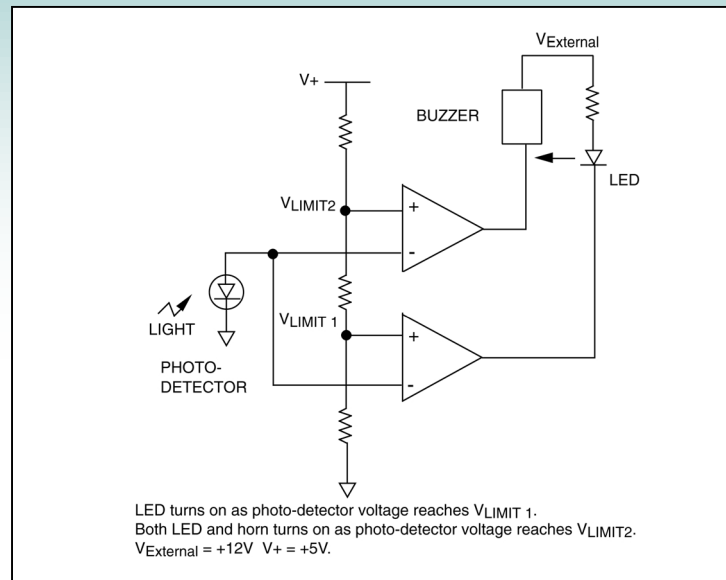




Dual Limit Photo-Detector Monitor



Description

This circuit has 2 limits, a lower limit and an upper limit, which produces 2 separate outputs, the first one function as an indicator and the second one function as a buzzer warning or an alarm condition. This type of signal can be used as a warning signal or a control signal whenever V_{LIMIT2} has been exceeded. The output of comparator with V_{LIMIT2} can easily drive multiple outputs, which can include, in addition to the buzzer, a control gate and another LED indicator. Note that this circuit works with either open-drain or push-pull types of comparator output, depending upon the load(s) to be driven. The load, in many cases, can act as a pull-up, so that a pull-up resistor is not required. Alternatively, push-pull outputs can actively pull-up the output to shutdown the load. In either case an output resistor is not needed and its associated power consumption is eliminated.

Recommended Components

- ALD2301 and ALD2303 for open-drain outputs
- ALD2302 for push-pull outputs
- ALD2321 for high precision applications

Other Related Circuit Ideas

- Schematic no. cd_23001.0 Double Dual Limit Window Comparator
- Schematic no. cd_23002.0 Dual Limit Window Comparator
- Schematic no. cd_23004.0 Zero Crossing Detector

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