
Application

Security cameras sometimes use Infrared LEDs, in a circular ring assembly, surrounding the lens. This provides illumination which is sensitive to the camera but undetectable by the human eye. The ring will have from 20 to 100 IR LEDs (OP295 type) and will illuminate a wide area at a short depth. The average LED ring can draw 2 Amps of current.



Requirement

To provide a much greater depth of field with lower power consumption, VCSEL Lasers may be applied in place of IR LEDs. Typically only 8, and as little as 4 VCSEL components are needed to replace 20 IR LEDs, and can draw less than 0.1 Amps, or 5% of the IR LED power consumption. The VCSEL solution also results in less unwanted reflections in narrow spaces and better long distance visibility and clarity. A smart solution for night time security cameras in un-lighted spaces in indoor and outdoor areas.

Solution

OPV330

- Low-cost VCSEL Infrared Laser in the popular 3mm plastic package
- Low drive current/high on axis intensity
- Narrow and concentric beam



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.