LED Chip Design

Standard Mid Infrared LED chip

This shape of the LED chip is typical for most of LED Microsensor NT standard LED models (Lms XX LED series).

Main features of standard packaging are:

- Small size of the LED chip (close to point source);
- Effective heat dissipation from the active layer;
- Uniform current distribution in the active region;
- Cost effective (due to small size).

Mid Infrared Flip-chip LED

In case of standard chip design top contact will hinder the extraction of light. This fundamental trade-off can be avoided by flip-chip packaging – LmsXXLED-FC models.

Main features of flip-chip packaging are:

- Larger size of the LED chip;
- Contact metal pads are not hindering the emission from the active region;
- Flip-chip packaging is more expensive compared with standard packaging due to larger size of the chip and more complicated fabrication process.