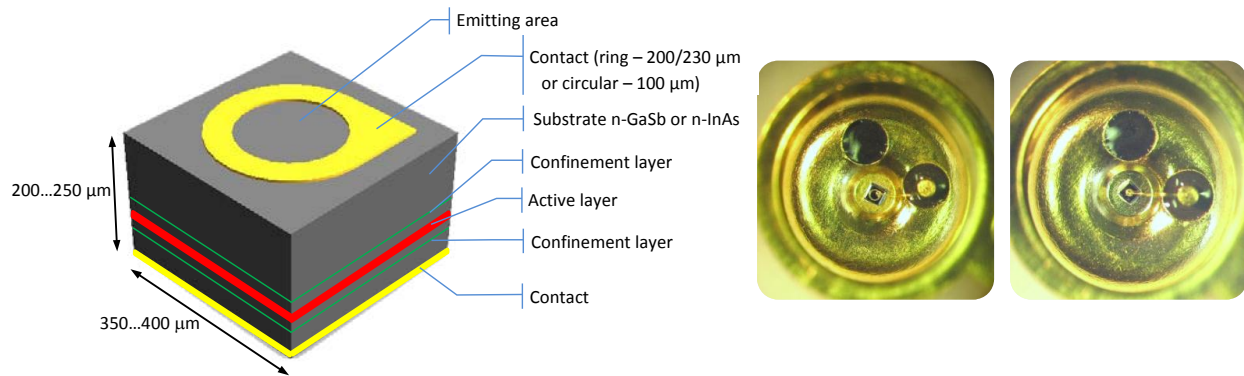


## Standard Mid Infrared LED chip

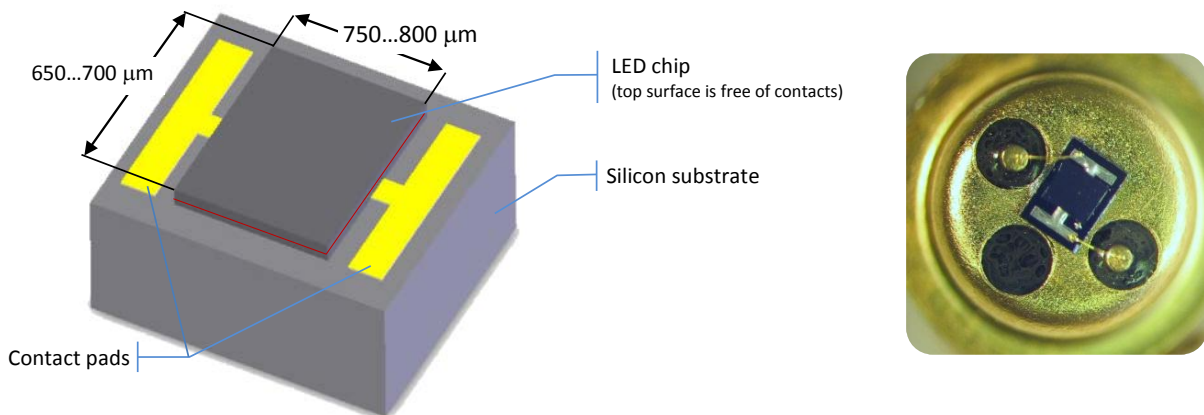


This shape of the LED chip is typical for standard LED models.

Main features 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.