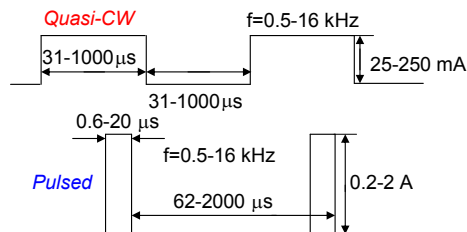
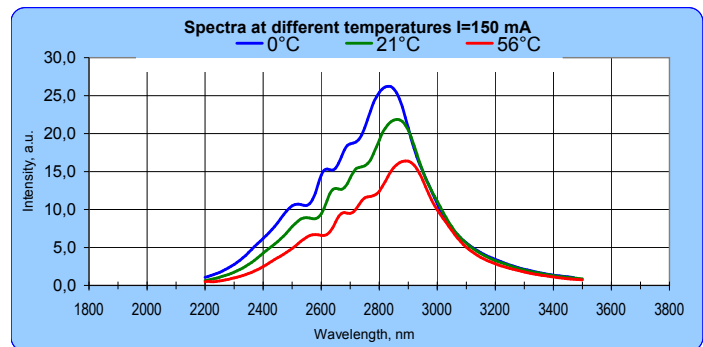
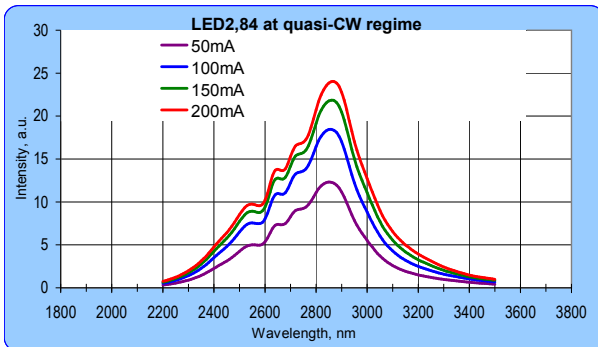


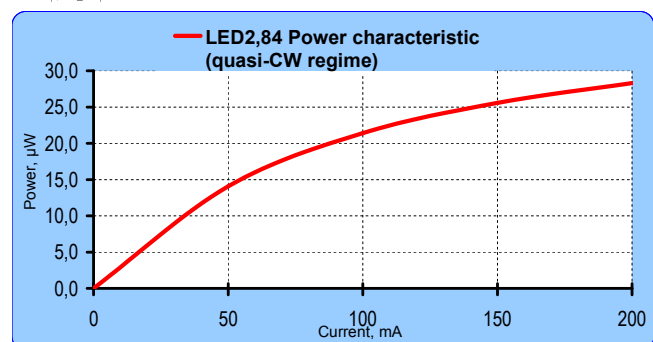
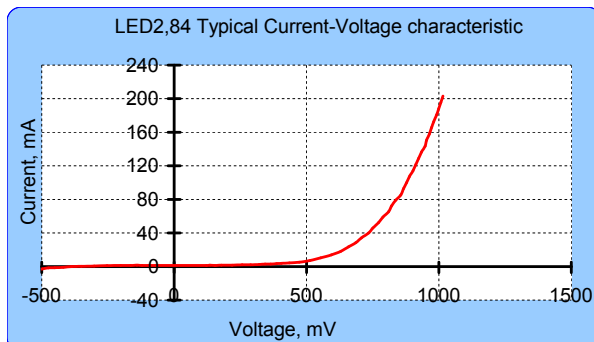
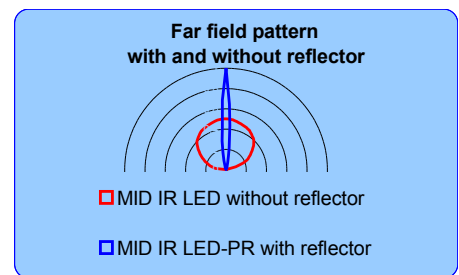
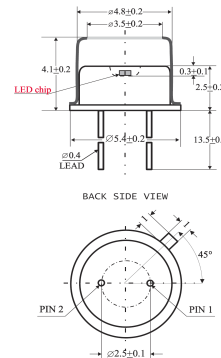


Light Emitting Diodes with central wavelength 2,84  $\mu\text{m}$  series are based on heterostructures grown on InAs substrates. InAsSbP is used in the active layer. Wide band gap solid solutions InAsSbP with P content 50% are used for good electron confinement.

| Parameters   | Units                                 | Conditions | Ratings           |      |      |
|--|---------------------------------------|------------|-------------------|------|------|
|  |                                       |            | Min               | Typ  | Max  |
| Peak emission wavelength   | $\mu\text{m}$                         | T=300 K    | 2,80              | 2,84 | 2,90 |
| FWHM of the emission band  | nm                                    | 150 mA CW  | 300               | 400  | 500  |
| Quasi-CW Optical Power   | $\mu\text{W}$                         | 200 mA qCW | 18                | 25   | 35   |
| Pulsed Optical Power   | $\mu\text{W}$                         | 1 A        | 120               | 150  | 170  |
| Switching Time   | ns                                    | T=300 K    | 10                | 20   | 30   |
| Operating Temperature Range, $^{\circ}\text{C}$  | -240 $^{\circ}$ $\div$ +50 $^{\circ}$ |            |                   |      |      |
| Emitting Area, $\mu\text{m}$   | 300x300                               |            |                   |      |      |
| Soldering temperature  | 260 $^{\circ}\text{C}$                |            |                   |      |      |
| Package  |                                       |            |                   |      |      |
| TO-18 with a non-removable cap without a window  |                                       |            | <b>MID IR LED</b> |      |      |
| TO-18 with a parabolic reflector without a window  |                                       |            | MID IR LED-PR     |      |      |
| TO-18 with a parabolic reflector with a window   |                                       |            | MID IR LED-PRwin  |      |      |
| TO-5 with a built-in thermocooler and thermoresistor, covered by a cap with a window                 |                                       |            | MID IR LED-TEC    |      |      |
| TO-5 with a built-in thermocooler and thermoresistor, covered by a parabolic reflector with a window |                                       |            | MID IR LED-TEC-PR |      |      |



Maximum current is 220 mA at quasi-CW  
Maximum pulsed current is 1 A (duration 500 ns, repetition rate 2 kHz)  
Optimal operating current is 150-200 mA at quasi-CW.



**RELATED PRODUCTS**

- PD36 series Photodiodes** can be used for detecting LED emission
- LED driver D-31M** can be used for LED power supply in quasi-CW and pulse modes
- LED driver mD-1c** can be used for LED power supply in a quasi-CW mode
- LED driver mD-1p** can be used for LED power supply in a pulse mode