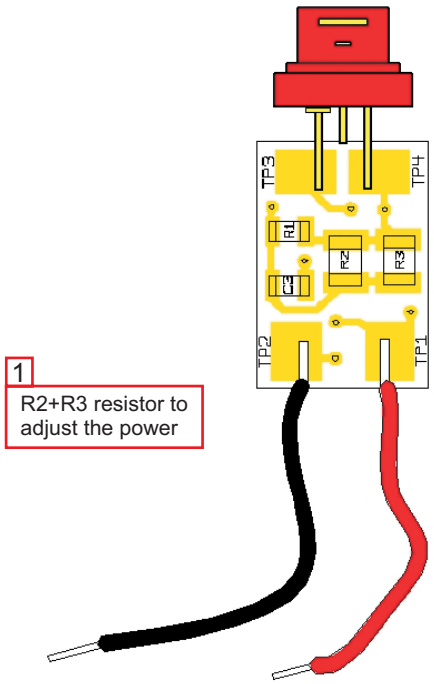
Driver board for CW - Laser Diodes

- ❑ Driver current: 70 mA max.
- ❑ Operating voltage: 3 V...6 V max.
- ❑ Integrated protection against incorrect polarity for IC and Laser diode
- ❑ Permanent disconnection in case of excess current and overheating of the laser diode
- ❑ Monitor diode current: 10 µA...2,5 mA
- ❑ PCB size: 7 mm x 10 mm



Description

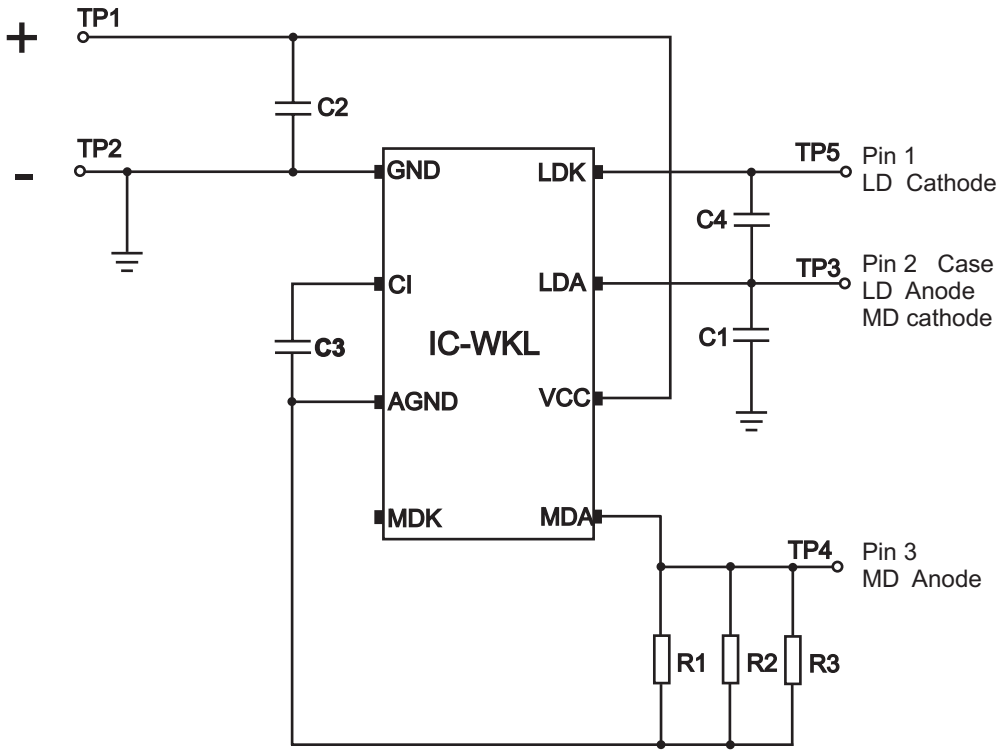
PCB layout is designed for laser diodes with N-Type connection.
The power adjustment of the laser diodes is carried out with the R2+R3 resistor, which is parallel to the already equipped R1 resistor. R1 has a value of 36 KiloOhm, so that most laser diodes can be operated in lower performance range.
In order to increase the optical power of the laser diode, the total R1//R2//R3 resistor is decreased by the R2+R3 resistor.

Calculation of R_{tot}:

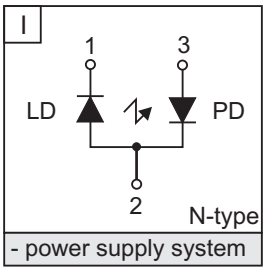
$$\frac{500\ mV}{I_{monitor}\ mA} = R_{tot}$$

Carl-von-Linde Str. 40
D-85716 Unterschleißheim
Tel.: +49 89 321412 - 0
Fax: +49 89 321412 - 11
www.imm-laser.de
info@imm-laser.de

Circuit diagram



Pin-connection of the laser diode



Attention:
Diagrams can vary depending on manufacturer.

Carl-von-Linde Str. 40
D-85716 Unterschleißheim
Tel.: +49 89 321412 - 0
Fax: +49 89 321412 - 11
www.imm-laser.de
info@imm-laser.de