

FEATURES:

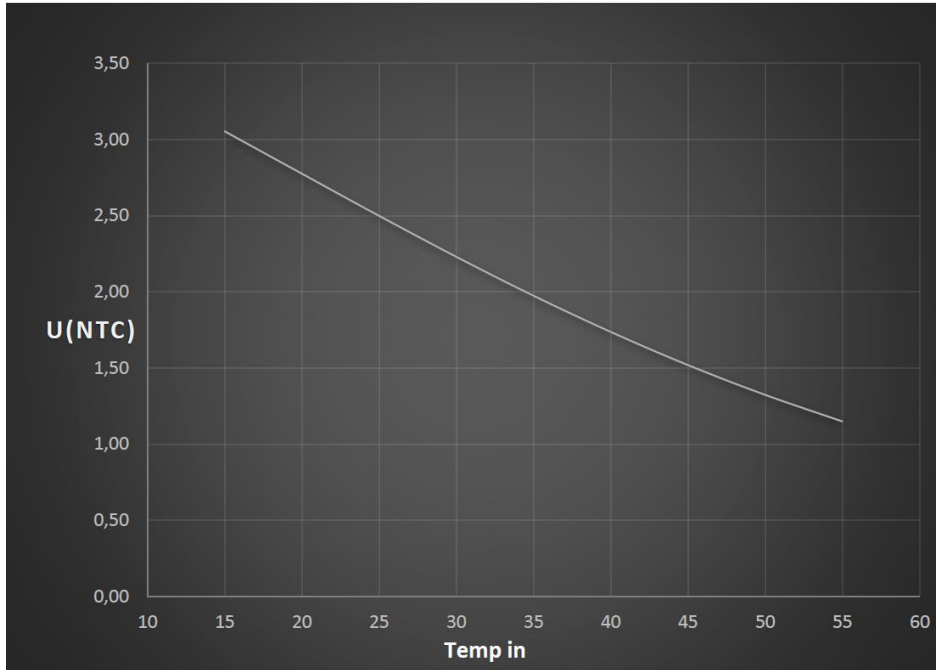
- Laser diode driver for butterfly 10 or 14-Pin LC96 package
- Integrated PI- control loop for laser built in Peltier element
- Wide input voltage range
- Very low power dissipation
- Transient protection
- Overtemperature protection for driver
- Analog set point control
- Enable/Disable for laser current
- Slow start laser diode protection
- Single power supply for complete diode laser current source
- Easy to mount and user friendly
- Optional heat sink
- Customized solutions possible



PARAMETERS:

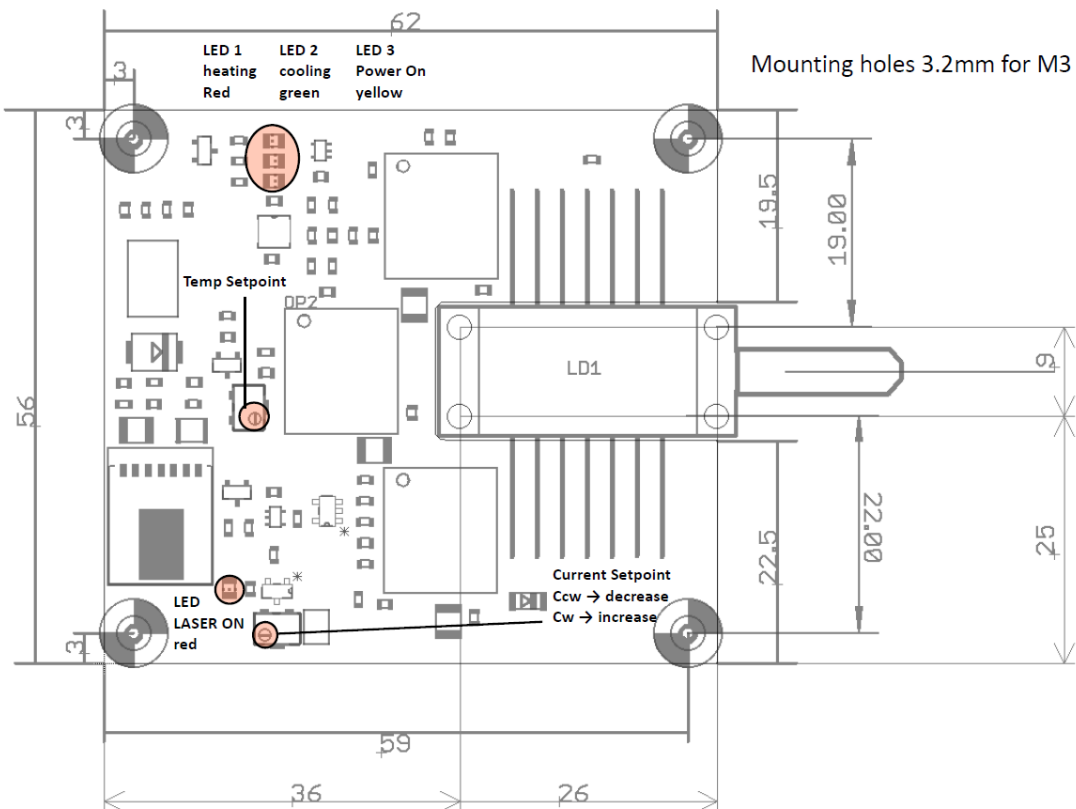
Parameter	Laser diode driver
Voltage output	0...4V
Current output	0...2 Amps (TEC and laser current in total under 2.8 A)
Current resolution	Analog Input unlimited
Current accuracy	±0,5%
Current stability	<0,1%
Current noise	< 5mA rms in cw mode
Current limit	2,1 Amps
Rise time	<150µs
Fall time	<150µs
Enable input	TTL
Parameter	TEC control
Sensor type	NTC10k
TEC current	±2 Amps (TEC and laser current in total under 2.8 A)
TEC voltage	±2,5V
Temperature controller	Set point potentiometer 15-25°±1°
Relative accuracy	±0,5K
Parameter	Common data
Voltage input	7...25Vdc
Power dissipation	<15 Watts
Dimensions [mm]	62x56x20 (Length x Width x Height)
Weight	0,016kg
Location of use	Only for inside use
Environmental conditions	
Temperature range	Operation 10 ... 45 °C (non-condensing) Storage -40 ... 70 °C
Relative Humidity	Operation ≤ 95 % (non-condensing) Storage ≤ 95 % (non-condensing)
Vertical height of use	Storage 12000 m

TEMPERATUR SETPOINT (NTC-10k) DIAGRAMM

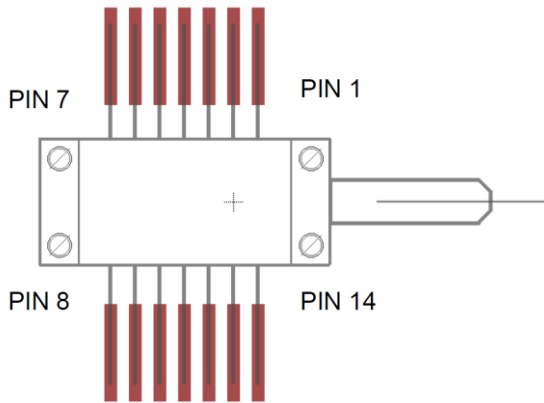


MECHANICAL DRAWING

All dimensions are in mm



LASER DIODE CONNECTION



PIN	FUNCTION	SPECIFICATION AND REMARKS
1	TEC	Maximum ± 2 Amps
2	NTC+	Thermistor NTC 10k High potential 5V
3	PD	Not used *
4	PD	Not used *
5	NTC-	Thermistor NTC 10k Low potential 2.5V @ 25°C
6-9	N.C.	Not used
10	LDA	Laser diode anode
11	LDK	Laser diode cathode
12/13	N.C.	Not used
14	TEC	Maximum ± 2 Amps

*Automatic Power Control on Request

INTERFACE

Connector X2 type Fischer WSL6 (PIN 1 MARKED)



PIN	FUNCTION	SPECIFICATION AND REMARKS
1	Temp-Monitor	Normal operation 2.5V (see diagram chapter 9)
2	External Set point Laser Current (option via Jumper)	0...2V 1V/1A [please contact default: disabled] (input Impedance = 10k Ω)
3	Monitor Laser Current	Analog Voltage 0...2V 1V/1A (output impedance 1k Ω)
4	Enable Laser Current	LOW signal (connect to pin 5 to start laser)
5	GND	Power supply return path connected to Laser Diode Cathode (-)
6	Power Supply	7..24V max. 2.2A ripple max. +/- 20mV (use filters to prevent reverse noise generated from the driver board)

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