



LD-945-180-BT-SM



DEVICE

945 nm Fiber Coupled Diode Laser, 180 mW, SM Fiber

OVERVIEW

The Optilab LD-945-180-BT-SM is a 945 nm fiber coupled diode laser, available with up to 180 mW of continuous output power, with single mode fiber. It features in a high brightness and offers excellent stability and reliability. This laser chip design offers un-measurable degradation and long lifetimes. Our 945 nm single mode line serves a broad range of applications including optical data storage, laser ranging and graphics.

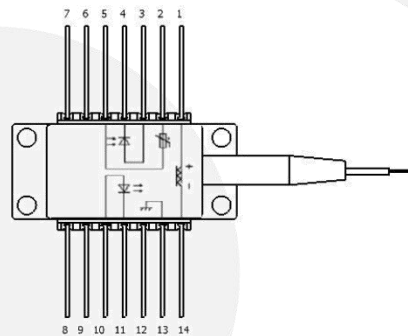
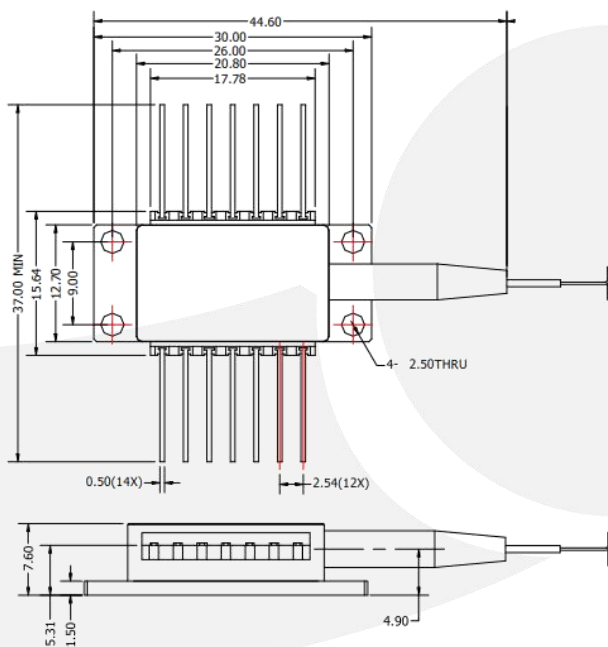
FEATURES

- 945 nm wavelength
- Up to 180mW CW output power
- Epoxy-free, and flux-free 14-PIN butterfly package with SM fiber
- Integrated thermoelectric cooler, thermistor, and monitor diode
- Telcorida GR-468 compliant
- Rohs compliant
- High quality, and high reliability

USE IN

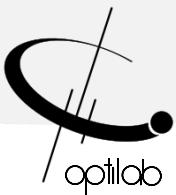
- Optical data storage
- Laser ranging
- Graphics

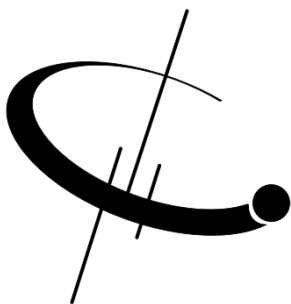
MECHANICAL DRAWING



Unit: mm

PIN	Description	PIN	Description
1	TEC (+)	14	TEC (-)
2	Thermistor	13	Case Ground
3	PD Anode	12	NC
4	PD Cathode	11	LD Cathode
5	Thermistor	10	LD Anode
6	NC	9	NC
7	NC	8	NC





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SPECIFICATIONS

Optical Data

Laser Type	Fabry-Perot
CW-Output Power	180 mW typ.
Center Wavelength	945±5 nm
Spectral Width	2.0 nm max.; 0.5 nm typ.

Electrical Data

Operating Current	370 mA typ.; 420 mA max.
Threshold Current	30 mA typ.; 50 mA max.
Operating Voltage	1.9 V typ.; 2.2 V max.
Monitor Dark Current	50 nA max.
TEC Current	2 A max.
TEC Voltage	3.5 V max.
TEC Modul Power Consumption	5 W max.
Kink-Free Power	330 mW min.
Slope Efficiency	0.9 W/A typ.; 0.8 W/A min.
Monitor Responsivity	1 µA/mW typ.; 20 µA/mW max.
Monitor Responsivity Stability	20% max.

Fiber Data

Total Fiber Length	1 m (Standard)
Fiber Type	Single Mode
Connector	FC/APC(Standard) or None

Others

Operating Case Temperature	-20 °C to +50 °C
Storage Temperature	-40 °C to +80 °C
Operating Humidity	15% to 75%
Monitor Responsivity	20 µA/mW max.
Material	GaAs

