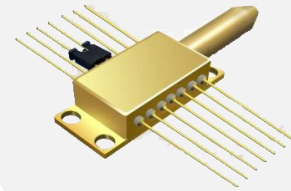




LD-785-600-BT-MM



DEVICE

785 nm LD, 600 mW, 14-pin Butterfly Package, MM Fiber

OVERVIEW

The Optilab LD-785-600-BT-MM is a 785 nm laser diode, with 14-pin butterfly package. This high-power, high-efficiency, and high-stability product is made using professional coupling technology. The product has 600 mW CW output power, 600 mW fiber output power and 105 μm 0.22 NA fiber. This laser can be used in raman spectroscopy, sensing, medical treatment, quantum photonics, optical pumping and military.

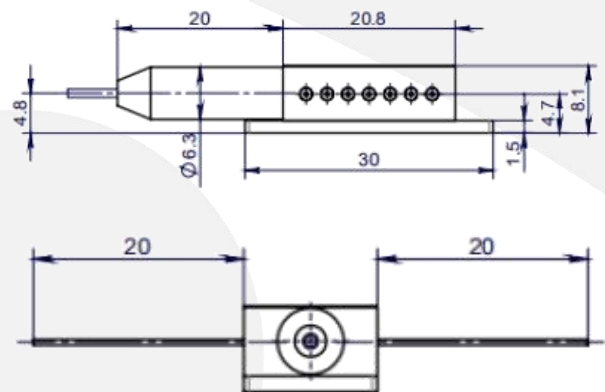
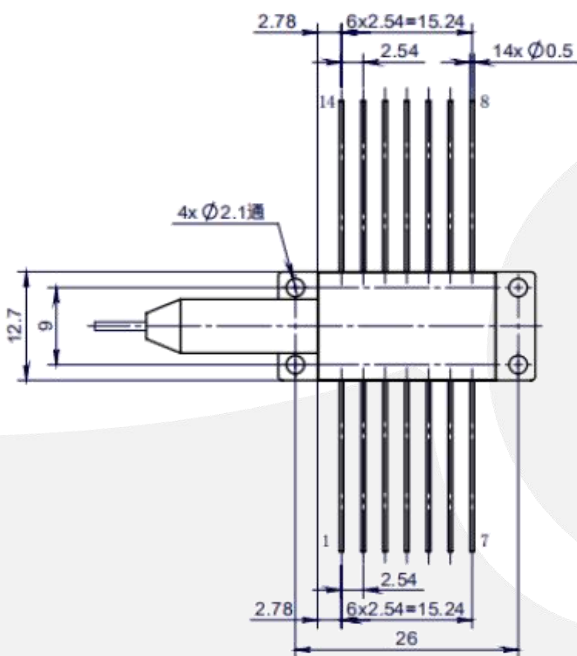
FEATURES

- 785 nm wavelength
- 600 mW CW output power
- Core diameter 105 μm
- 0.22 NA
- Narrow Linewidth

USE IN

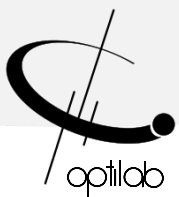
- Raman spectroscopy
- Sensing
- Quantum photonics
- Medical treatment
- Optical pumping
- Military

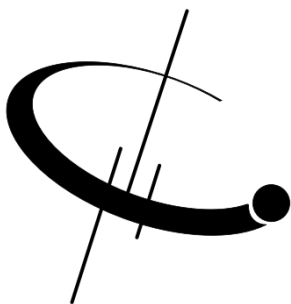
MECHANICAL DRAWING



Unit: mm

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





LD-785-600-BT-MM

SPECIFICATIONS

Optical Data

Laser Type	Fabry-Perot
CW-Output Power	600 mW min.
Center Wavelength	785±0.5 nm
Spectral Width	0.1 nm max.
Wavelength Shift with Temperature	0.01 nm/°C typ.

Electrical Data

Electrical-to-Optical Efficiency	30% typ.
Operating Current	1.1 A typ.; 1.5 A max.
Threshold Current	0.4 A typ.
Operating Voltage	1.9 V typ.; 2.2 V max.
Slope Efficiency	1.0 W/A typ.
TEC Current	2.2 A max.
TEC Voltage	8.75 V max.
PD Current	300 µA min.; 500 µA max.
Thermistor	10±3%/3477 (KΩ)/β(25 °C)

Fiber Data

Core Diameter	105 µm typ.
Cladding Diameter	125 µm typ.
Buffer Diameter	0.9 mm
Numerical Aperture	0.22 NA typ.
Total Fiber Length	1 m (Standard) typ.
Bending Radius	50 mm min.
Connector	FC

Others

ESD	500 V max.
Operating Case Temperature	20 °C to +30 °C
Storage Temperature	-20 °C to +70 °C
Operating Humidity	15% to 75%

