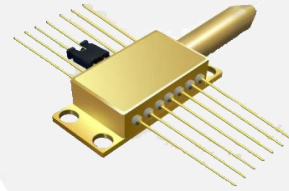




LD-830-600-BT-MM



DEVICE

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

OVERVIEW

The Optilab LD-830-600-BT-MM is a 830 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 μ m 0.22 NA fiber. This laser can be used in raman spectroscopy, sensing, medical treatment, quantum photonics and optical pumping.

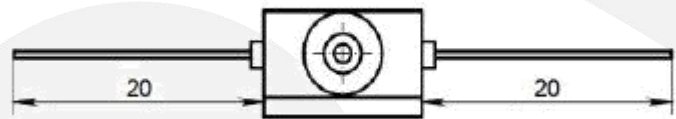
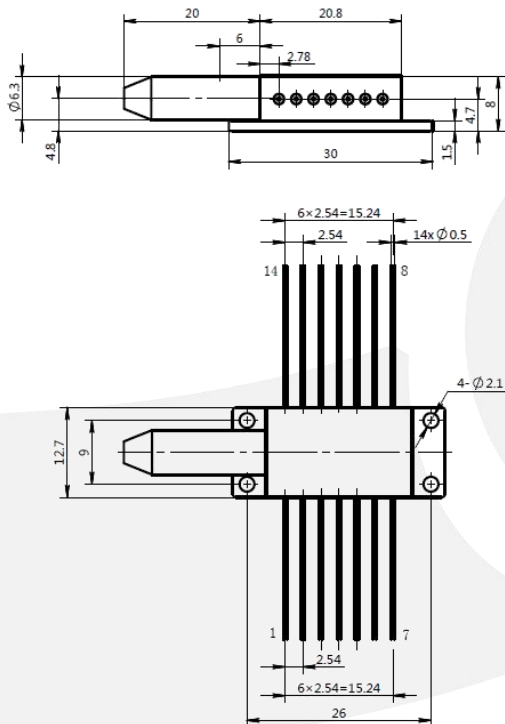
FEATURES

- 830 nm wavelength
- 600 mW CW output power
- $\Delta\lambda < 0.1$ nm
- Core diameter 105 μ m
- 0.22 NA
- Narrow Linewidth

USE IN

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

MECHANICAL DRAWING



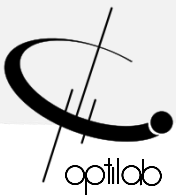
Unit: mm

PIN Description

- 1 TEC (+)
- 2 Thermistor
- 3 PD (+)
- 4 PD (-)
- 5 Thermistor
- 6 NC
- 7 NC

PIN Description

- 8 NC
- 9 NC
- 10 LD (+)
- 11 LD (-)
- 12 NC
- 13 Housing
- 14 TEC (-)





LD-830-600-BT-MM

SPECIFICATIONS

Optical Data

Laser Type	Fabry-Perot
CW-Output Power	600 mW min.
Center Wavelength	830±0.5 nm
Spectral Width	0.1 nm max.
Wavelength Shift with Temperature	0.01 nm/°C typ.
Wavelength Shift with Current	0.03 nm/A typ.

Electrical Data

Electrical-to-Optical Efficiency	30% typ.
Operating Current	1.0 A typ.
Threshold Current	0.3 A typ.
Operating Voltage	1.8 V typ.
Slope Efficiency	0.9 W/A typ.
TEC Current	2.2 A max.
TEC Voltage	8.7 V max.
PD Current	100 µA min.; 1000 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)
Bending Radius	50 mm min.

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%

