



## PRODUCT DATA SHEET

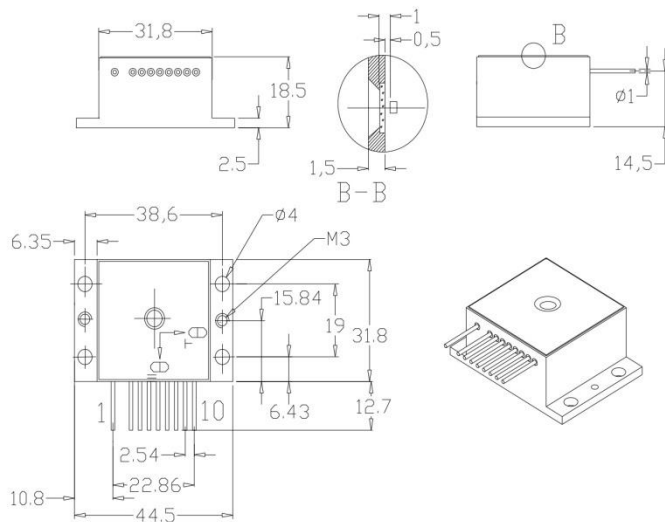
Laser Diode (HHL w/window package)

Model FB-M1470-2000HO

| Specification                             | Symbol                   | Typical                            | Unit                 |
|---|--------------------------|------------------------------------|----------------------|
| Laser Emitter                             |                          |                                    |                      |
| Peak Wavelength                           | $\lambda_{op}$           | 1470±10                            | nm                   |
| CW Optical Output Power                   | $P_{op}$                 | 2                                  | W                    |
| Operation Current                         | $I_{op}$                 | <5.5                               | A                    |
| Operation Voltage                         | $U_{ld}$                 | 1.15±0.1                           | V                    |
| Threshold Current                         | $I_{th}$                 | < 0.9                              | A                    |
| Beam Divergence (FWHM)                    | $\theta_{  }$            | 14±2                               | degree               |
| Beam Divergence (FWHM)                    | $\theta_{\perp}$         | 1±0.3                              | degree               |
| Spectrum Half-Width (FWHM)                | $\Delta\lambda$          | <8                                 | nm                   |
| Emitting Area                             | $W \times d$             | 100x1                              | $\mu m \times \mu m$ |
| Operation Mode                            | -                        | CW, QCW,<br>Pulse ( $\tau > 5ns$ ) | -                    |
| Operation Temperature                     | Top                      | 25                                 | degree               |
| Photo Diode Monitor                       |                          |                                    |                      |
| PD Monitor Current                        |                          | 1-1000                             | $\mu A$              |
| PD Reverse Voltage                        |                          | 9                                  | V                    |
| TEC                                       |                          |                                    |                      |
| Maximum Current                           |                          | 5                                  | A                    |
| Maximum Operation Voltage                 |                          | 3,8                                | V                    |
| Thermistor                                |                          |                                    |                      |
| Resistance                                |                          | 10                                 | kilohm               |
| Wavelength Temperature Coefficient        | $\Delta\lambda/\Delta T$ | 5.5±0.5                            | Å/degree             |
| Operation Current Temperature Coefficient | $\Delta I/\Delta T$      | 20±5                               | mA/degree            |
| Operation Temperature Range               |                          | -20... +40                         | degree               |
| Storage Temperature Range                 |                          | -40... +80                         | degree               |



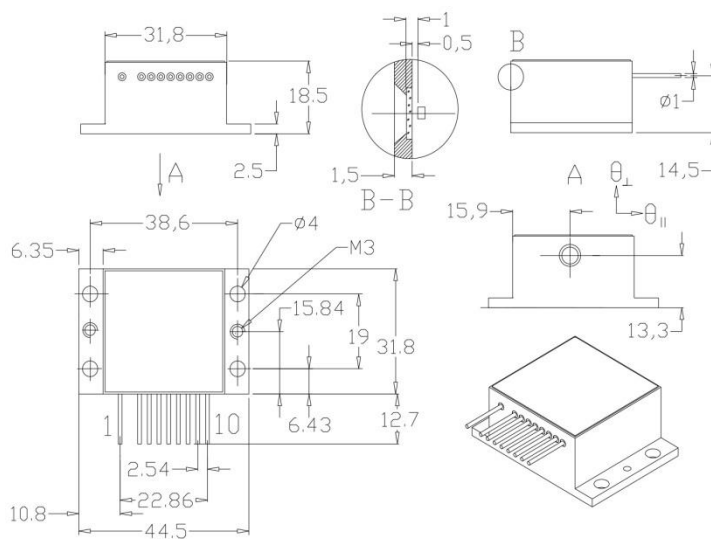
**Output window on the top of HHL (optional)**



- 1-TEC (-)
- 2-
- 3-
- 4- Laser Anode(+)
- 5- Thermistor (2)
- 6- Thermistor (1)
- 7- Laser Cathode (-)
- 8- PD Anode (+)
- 9- PD Cathode (-)
- 10- TEC (+)

Output window of 0.5 mm in thickness

**Output window on the front side of HHL (by default)**



- 1- TEC (-)
- 2-
- 3-
- 4- Laser Anode(+)
- 5- Thermistor (2)
- 6- Thermistor (1)
- 7- Laser Cathode (-)
- 8- PD Anode (+)
- 9- PD Cathode (-)
- 10- TEC (+)

Output window of 0.5 mm in thickness