



PRODUCT DATA SHEET

Laser Diode (HHL w/fiber package)

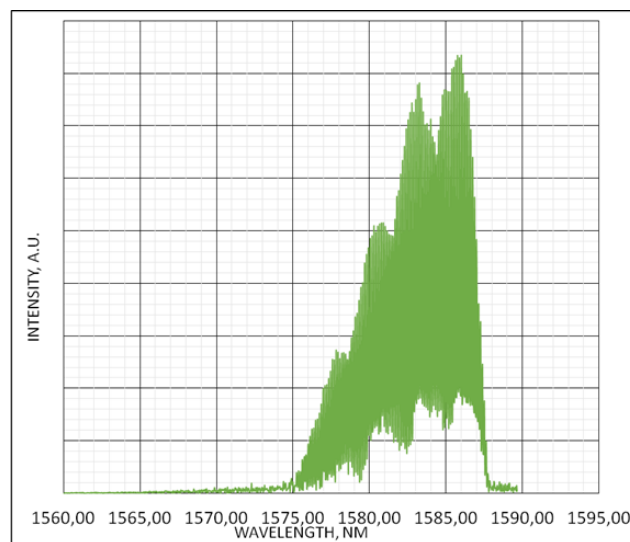
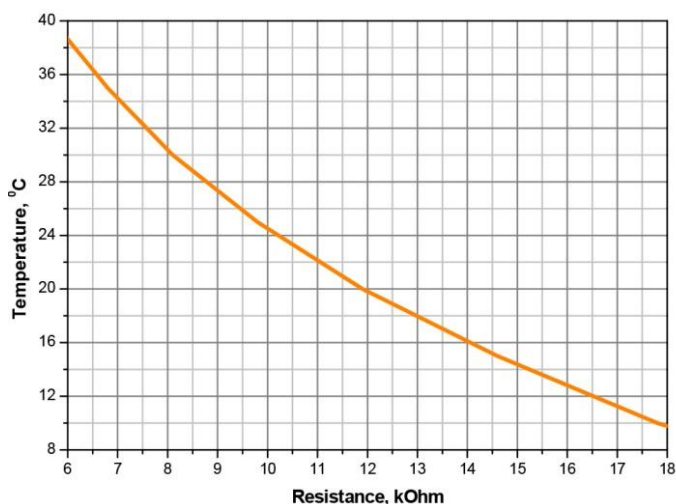
Model FB-M1600-500HF

| Specification | Symbol | Typical | Unit |
|---|--------------------------|------------------------------------|-----------|
| Laser Emitter (at Top=25 degree) | | | |
| Peak Wavelength | λ_{op} | 1600±20 | nm |
| CW Optical Output Power | P_{op} | 0.5 | W |
| Operation Current | I_{op} | <2,5 | A |
| Operation Voltage | U_{ld} | 1.2±0.1 | V |
| Threshold Current | I_{th} | < 0.6 | A |
| Spectrum Half-Width (FWHM) | $\Delta\lambda$ | < 6 | nm |
| Operation Mode | | CW, QCW, Pulse ($\tau > 5ns$) | - |
| Optical Fiber | | | |
| Fiber diameter | | 100 or 200 | μm |
| Coating diameter | | 125 or 220 | μm |
| Outer diameter | | 3 | mm |
| Numerical Aperture | | 0,22 | - |
| Fiber Length | | 1 | m |
| Optical Connector Type | | FC | - |
| Photo Diode Monitor | | | |
| PD Monitor Current | | 1-1000 | μA |
| PD Reverse Voltage | | 9 | V |
| TEC | | | |
| Maximum Current | | 5 | A |
| Maximum Operation Voltage | | 3,8 | V |
| Other parameters | | | |
| Thermistor Resistance | | 10 | kilohm |
| Operation Temperature Range | | -20... +40 | degree |
| Wavelength Temperature Coefficient | $\Delta\lambda/\Delta T$ | 4±0.5 | Å/degree |
| Operation Current Temperature Coefficient | $\Delta I/\Delta T$ | 15±5 | mA/degree |
| Guaranteed Life Time | | 1 | year |

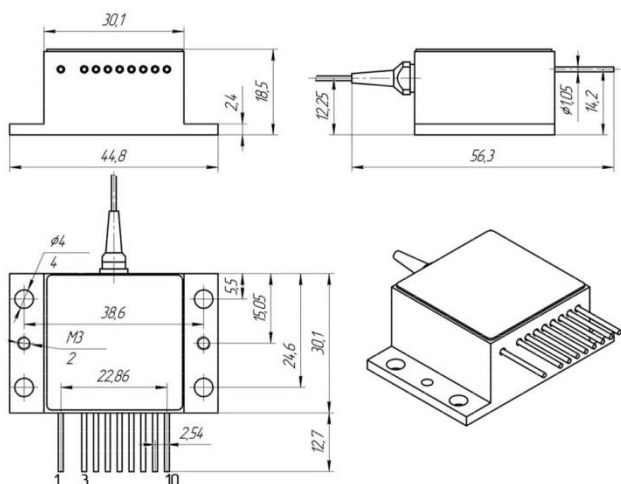


Thermistor resistance diagram

Typical Spectrum



Dimensions and pinouts



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