



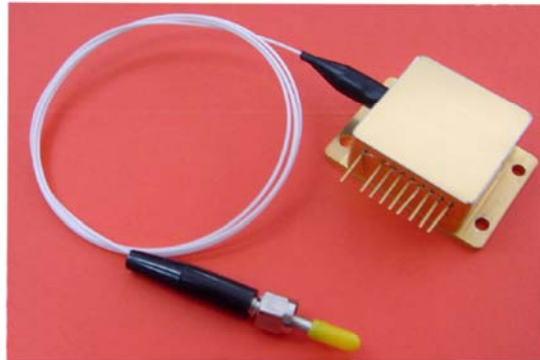
635nm Fiber-Coupled Modules with Single Emitter

Features:

- High brightness
- Available in volume
- High coupling efficiency
- Compact, hermetically sealed package
- A turnkey system is available

Applications:

- Photo Dynamic Treatment
- Research with visible photo sensitive materials and therapies



Absolute Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNIT
Reverse Voltage	V_r	2.0	V
Operating Temperature	T_{op}	+10~+20	°C
Storage Temperature	T_{stg}	-20 ~ +80	°C
Lead Soldering Temperature (10 sec.)	T_{is}	260	°C

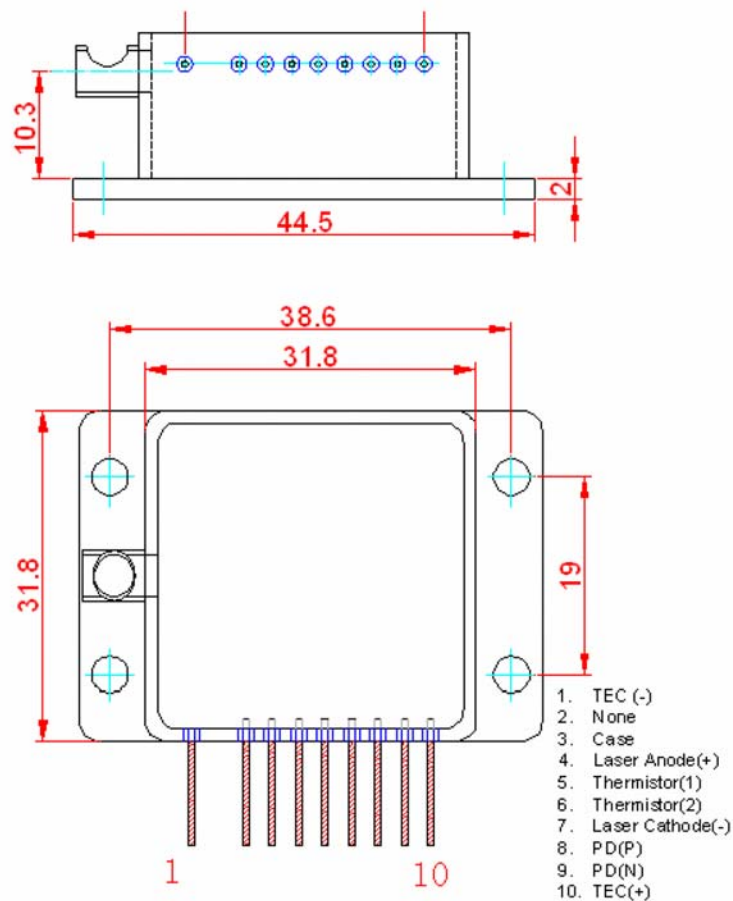
Specifications

RLCD-M63H-350

Peak Wavelength @15°C	635±10nm
Output Power (Typ.)	350mW
Spectral Width (FWHM)	≤2.5nm
Temperature Coefficient of Wavelength	0.2nm / °C
Threshold Current (Typ.)	700mA
Operating Current (Typ.)	1A
Operating Voltage	≤2.2V
Thermistor Value (25°C)	(10±0.5)KΩ
TEC Max. Current	4.0A
TEC Max. Voltage	9.8V
Fiber Bundled Diameter	100µm
Fiber Numerical Aperture	0.22
Fiber Length (Typ.)	70cm
Minimum Bend Radius	25mm
Connector Type	SMA905 / ST / FC
Package Type	9-pin HHL



9-pin HHL Package View



OPERATIONAL PRECAUTIONS

Laser Safety

Laser light emitted from this laser diode is harmful to the human. Avoid looking directly into the module aperture or the fiber end when the device is in operation.

ESD Caution

Handle laser diodes and modules with extreme care to prevent electrostatic discharge (ESD), which is the main cause of unexpected diode failure.

Always wear wrist straps, work on grounded anti-static mats, and follow extremely rigorous anti-static procedures.

If a laser diode is handled carelessly, it may be destroyed instantly by ESD from a human body. When not in use, shorten the leads of laser diodes to protect against ESD.



Operation Caution

Prevention of current surge

Laser diodes are of fast response devices. Use surge-protected outlets to prevent the possibilities of large momentary transients from switches, power supply and other high current devices such as soldering irons, vacuum pumps, fluorescent lamps, etc.

Soldering

- ◆ Keep the solder iron (30W) tip temperature less than 260°C.
- ◆ Apply solder promptly once the connections are brought in place.
- ◆ Grounded the metal part of the solder iron tip if solder iron is used more than 5 min.

Cutting leads

- ◆ Perform the work over conductive mats.
- ◆ Wear grounded anti-static wrist bands.
- ◆ Do not use air nippers as they are a source of static electricity.

Handling

- ◆ Do not directly touch the leads of laser diodes or modules.
- ◆ Do not touch the window glass of a laser diode or a fiber emitting end with bare hands.
- ◆ Use care to prevent damage to the window glass by tools or other objects.
- ◆ When dust deposited on the window glass, be sure to remove with an air gun.

Fiber Caution

The bending diameter of fiber should be larger than 4cm for short term storage and larger than 8cm for long term storage.

Operation Procedure

- Connect the electrodes of a laser diode or module correctly according to the supplied pin layout.
- Set the current or voltage to zero before switching on the power supply.
- Increase the current or voltage gradually to the required value; never exceed the rated value.
- Suggest to put the modules on a heat sink when operation.
- Decrease the current or voltage gradually to zero when finish.
- Disconnect the module.
- Turn off the power supply.

Electrically shorten LD module and store in non-extreme conditions.

Suggest using the constant current power supply.

