



650nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, Cost effective

Model: LDM650-A-B-C-D-1-62

* A – power(mW), B – diameter(mm), C – length(mm), D – lens material (P or G)

Features:

- Red dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- PCB enveloped by black heat shrinkable tube.
- Cost effective.
- Ultra compact size.
- More wavelength with this design: 635nm, 850nm

Specifications:

No	Parameters	Value
1	Peak Wavelength	650nm
2	Operation Voltage	3-6V
3	Operation Current	<22mA @ <1mW <25mA @ <3mW <40mA @ <7mW
4	Output Power	<1mW, <3mW, <7mW
5	Collimating Lens	Plastic or Glass
6	Divergence (Full angle) *	<0.5mrad, <1mrad or customized
7	Spot Size at 10m	5mm, 10mm, or customized
8	Operation Temperature **	-10°C ~ +50°C
9	Storage Temperature	-40°C ~ +85°C
10	Dimension (PCB not included) *** 3mm is added to total length with round PCB	Diameter: >4mm Length: >10mm
11	Housing	Brass
12	Mean time to failure(MTTF) 25 °C	5000hrs, 10000hrs

* Smaller divergence means smaller spot size, longer laser module length

** 60°C operation temperature product is available with 2~3 times price.

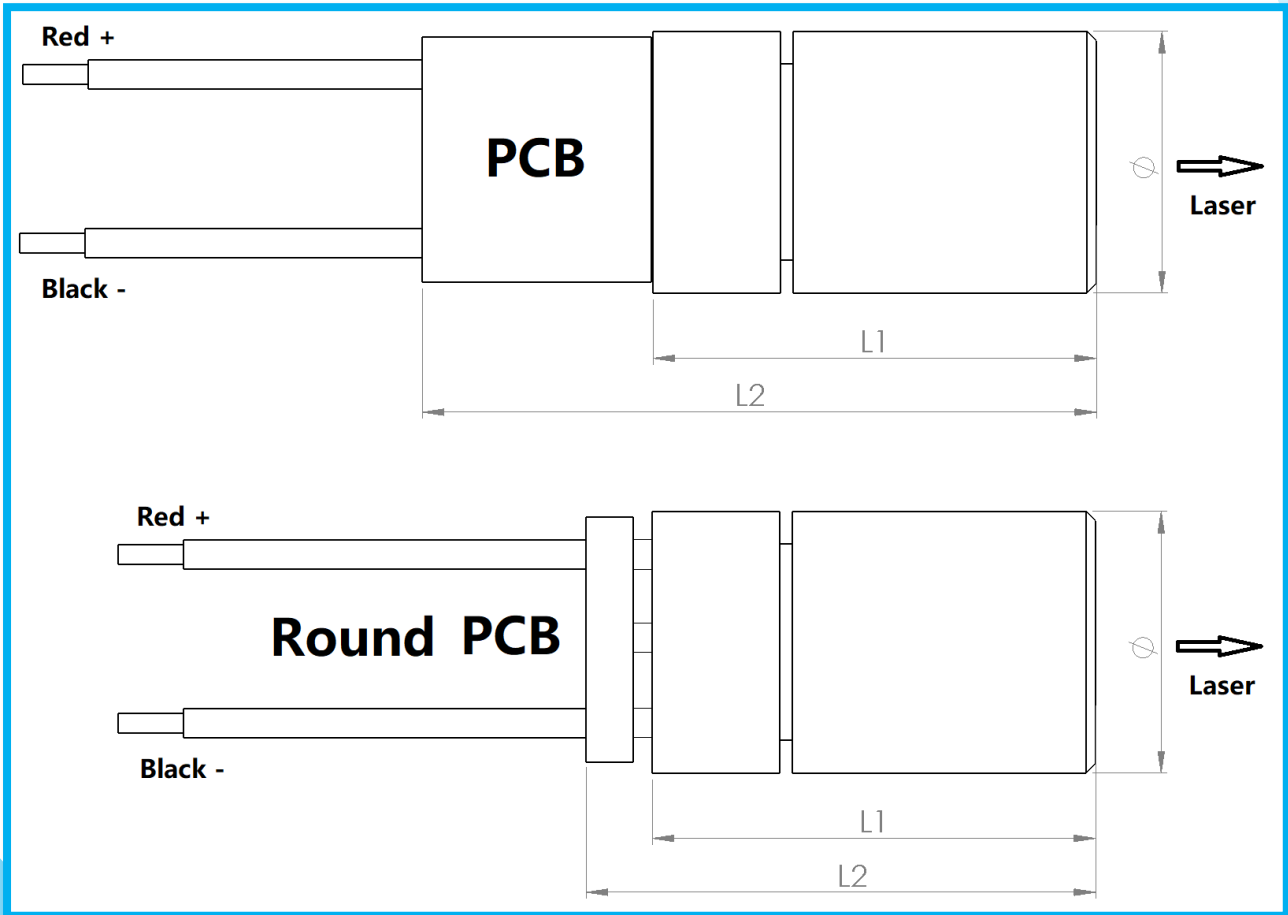
*** $\Phi 6 \times 17$ mm(plastic lens) and $\Phi 8 \times 20$ mm(plastic lens) is built in stock for quick delivery



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Standard Products:

Part Number	Description
LDM650-1-6-18-P-1-62	650nm, spot laser, <1mW, $\Phi 6 \times 17$ mm, Plastic lens
LDM650-3-6-18-P-1-62	650nm, spot laser, <3mW, $\Phi 6 \times 17$ mm, Plastic lens
LDM650-1-8-20-P-1-62	650nm, spot laser, <1mW, $\Phi 8 \times 20$ mm, Plastic lens
LDM650-3-8-20-P-1-62	650nm, spot laser, <3mW, $\Phi 8 \times 20$ mm, Plastic lens
LDM650-1-8-20-G-1-62	650nm, spot laser, <1mW, $\Phi 8 \times 20$ mm, Glass lens
LDM650-3-8-20-G-1-62	650nm, spot laser, <3mW, $\Phi 8 \times 20$ mm, Glass lens

Note: About 4mm can be subtracted from total length using round PCB.



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Cautions

- Do not operate the device above the maximum rating condition, even momentarily. It may cause unexpected permanent damage to the device
- Semiconductor laser device is very sensitive to electrostatic discharge. High voltage spike current may change the characteristics of the device, or malfunction at any time during its service period. Therefore, proper measures for preventing electrostatic discharge are strongly recommended.



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