650nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, PCB sealed with epoxy

Model: LDM650-A-B-C-D-1-10

** 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 sealed with epoxy, best shock resistance.
- Packaged in a single housing, best protection.
- Compact size.
- More wavelength with this design: 635nm, 850nm

Specifications:

No	Parameters	Value
1	Peak Wavelength	650nm
2	Operation Voltage	2.6-6V
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℃ ~ +50℃
9	Storage Temperature	-40℃ ~ +85℃
10	Dimension ***	Diameter: >8mm Length using glass lens: >18mm Length using plastic lens: >15mm
11	Housing	Brass or Anodized Aluminum
12	Mean time to failure(MTTF) 25 ℃	5000hrs, 10000hrs

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

*** 60℃ operation temperature product is available.*

**** Φ9x19mm(glass lens) and Φ9x15mm(plastic lens) is built in stock for quick delivery*

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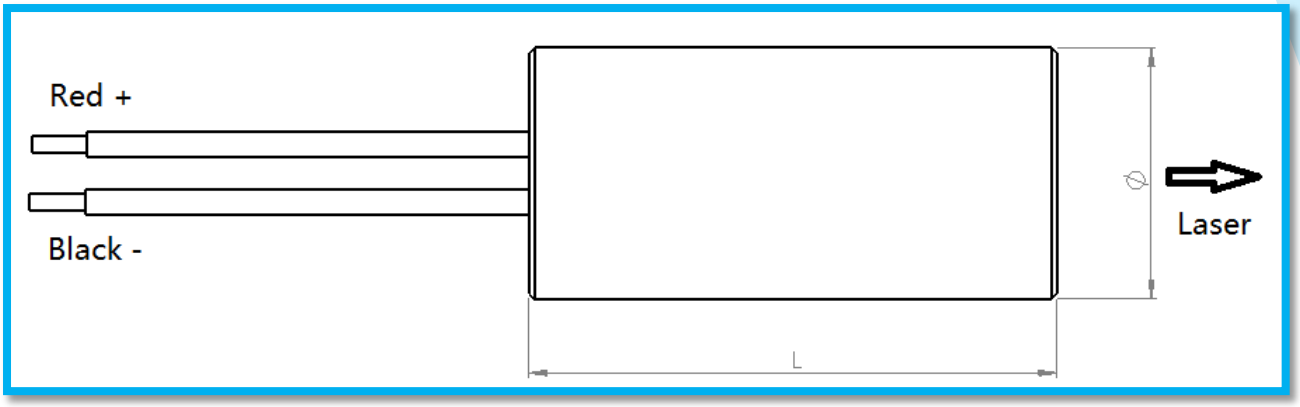

Standard Products:

Part Number	Description
LDM650-1-9-15-P-1-10	650nm, spot laser, <1mW, Φ9x15mm,Plastic lens
LDM650-3-9-15-P-1-10	650nm, spot laser, <3mW, Φ9x15mm, Plastic lens
LDM650-7-9-15-P-1-10	650nm, spot laser, <7mW, Φ9x15mm, Plastic lens
LDM650-1-9-19-G-1-10	650nm, spot laser, <1mW, Φ9x19mm, glass lens
LDM650-3-9-19-G-1-10	650nm, spot laser, <3mW, Φ9x19mm, glass lens
LDM650-7-9-19-G-1-10	650nm, spot laser, <7mW, Φ9x19mm, glass lens

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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.
- Do not look into the laser beam directly with the naked eyes. The laser beam may cause severe

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