Red Line Laser Module

<1mW, <5mW, <10mW

Red laser, line beam, PCB sealed with epoxy

Model: LDM6XX-A-B-C-G-2-1

** A – power(mW), B – diameter(mm), C – length(mm)*

Features:

- Red line 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: 650nm, 850nm

Specifications:

No	Parameters	Value
1	Peak Wavelength	635nm, 650nm
2	Operation Voltage	3-6V
3	Operation Current	Upon laser diode
4	Output Power	<1mW, <3mW, <7mW
5	Collimating Lens	Glass
6	Divergence (Full angle) *	<0.5mrad, <1mrad or customized
7	Line Fan Angle	>3°
8	Operation Temperature **	-10℃ ~ +50℃
9	Storage Temperature	-40℃ ~ +85℃
10	Dimension	Diameter: >9mm Length: >21mm
11	Housing	Brass or Anodized Aluminum
12	Mean time to failure(MTTF) 25 ℃	10000hrs

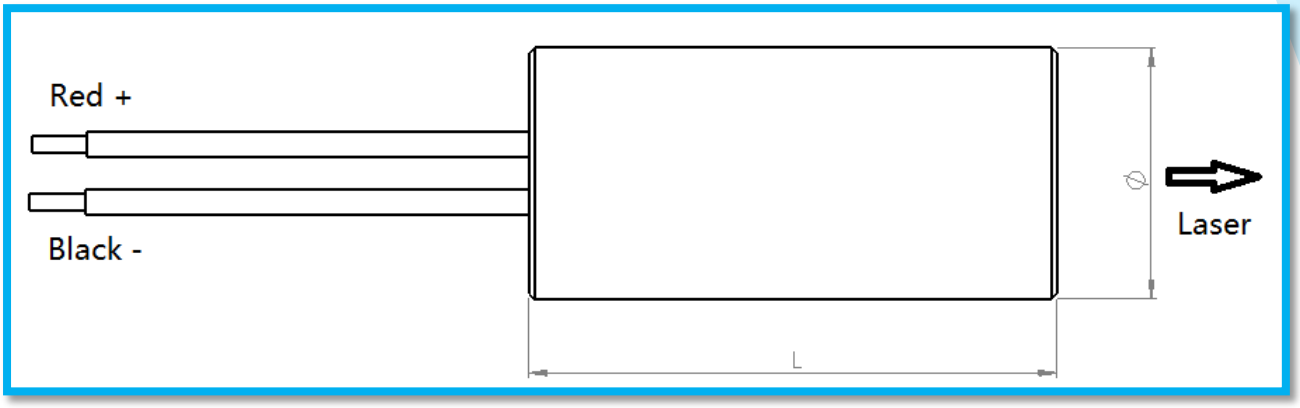
** Smaller divergence means thinner line.*

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

Red Line Laser Module

<1mW, <5mW, <10mW

Red laser, line beam, PCB sealed with epoxy



Standard Products:

Part Number	Description
LDM635-5-9-21-G-2-10	635nm, line laser, <5mW, Φ9x21mm, Glass lens
LDM650-5-9-21-G-2-10	650nm, line laser, <5mW, Φ9x21mm, Glass lens

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.

Z-OPTICS LIMITED
12# Qiao Xia Nan Road, Bei Bai Xiang, Yue Qing,
Zhejiang Province, 325603 P. R. China
Tel: +86-577-8181-0885,
Web site: www.z-optics.com
E-mail: sales@z-optics.com

635nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, PCB sealed with epoxy

Model: LDM635-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: 650nm, 850nm

Specifications:

No	Parameters	Value
1	Peak Wavelength	635nm
2	Operation Voltage	3-6V
3	Operation Current	<35mA @ <1mW <40mA @ <3mW <65mA @ <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*

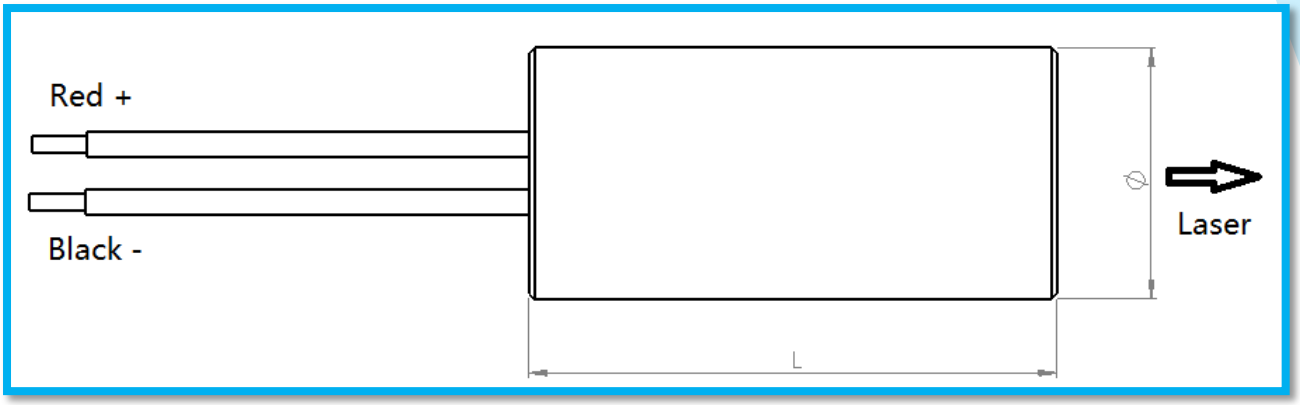
*** 60℃ operation temperature product is available with 2~3 times price.*

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

635nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, PCB sealed with epoxy



Standard Products:

Part Number	Description
LDM635-1-9-15-P-1-10	635nm, spot laser, <1mW, Φ9x15mm,Plastic lens
LDM635-3-9-15-P-1-10	635nm, spot laser, <3mW, Φ9x15mm, Plastic lens
LDM635-1-9-19-G-1-10	635nm, spot laser, <1mW, Φ9x19mm, glass lens
LDM635-3-9-19-G-1-10	635nm, spot laser, <3mW, Φ9x19mm, glass lens

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.

Z-OPTICS LIMITED
12# Qiao Xia Nan Road, Bei Bai Xiang, Yue Qing,
Zhejiang Province, 325603 P. R. China
Tel: +86-577-8181-0885,
Web site: www.z-optics.com
E-mail: sales@z-optics.com

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*

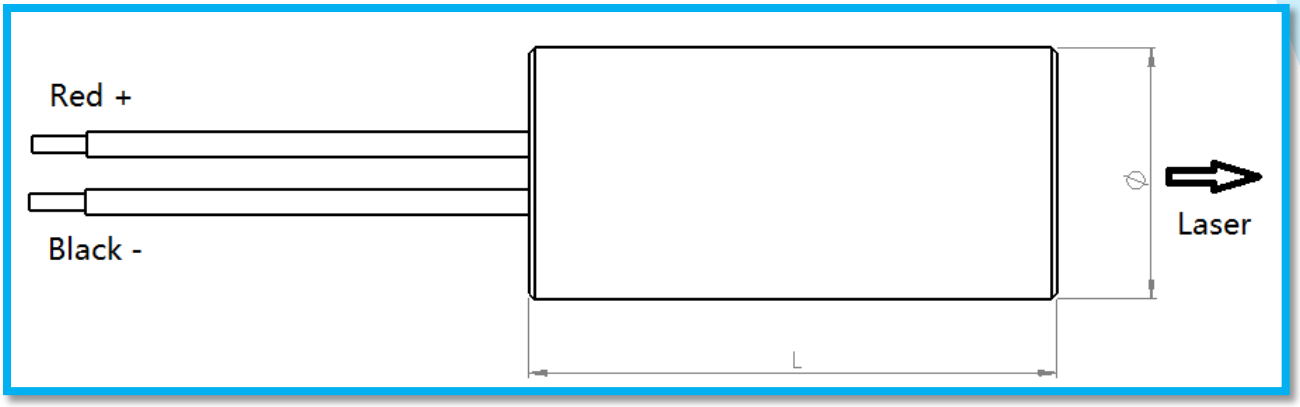
*** 60℃ operation temperature product is available.*

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

650nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, PCB sealed with epoxy



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

650nm Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, PCB sealed with epoxy

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

Z-OPTICS LIMITED
Qiao Xia Nan Road 12#, Bei Bai Xiang, Yue Qing,
Zhejiang Province, 325603 P. R. China
Tel: +86-577-8181-0885,
Web site: www.z-optics.com
E-mail: sales@z-optics.com

850nm Laser Module

<1mW, <5mW

IR laser, Spot beam, PCB sealed with epoxy

Model: LDM850-A-B-C-D-1-13

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

Features:

- IR 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, 650nm

Specifications:

No	Parameters	Value
1	Peak Wavelength	850nm
2	Operation Voltage	3-6V
3	Operation Current	<30mA
4	Output Power	<1mW, <3mW
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℃ ~ +60℃
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 ℃	10000hrs

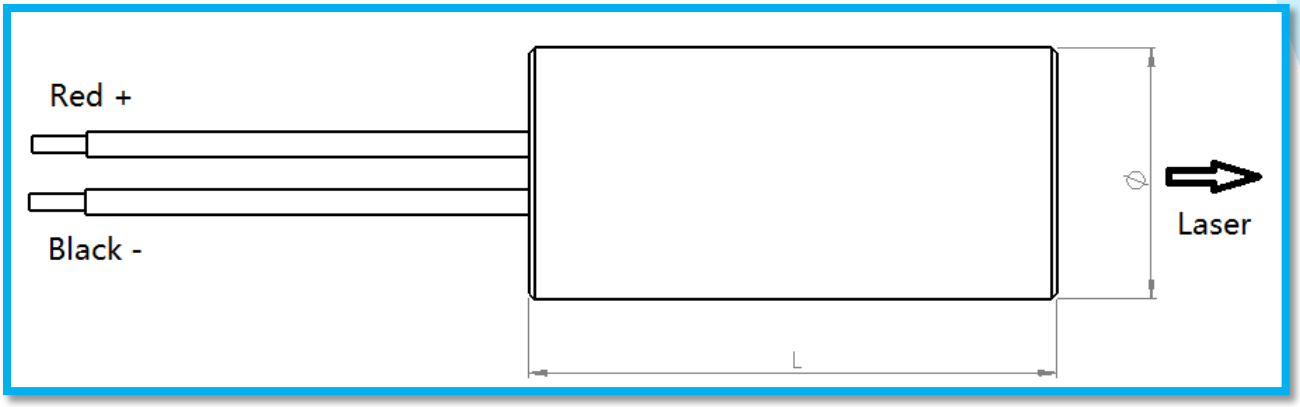
** Smaller divergence means smaller spot size, longer laser module length*

*** Φ9x19mm(glass lens) and Φ9x15mm(plastic lens) are on shelf for quick delivery*

850nm Laser Module

<1mW, <5mW

IR laser, Spot beam, PCB sealed with epoxy



Standard Products:

Part Number	Description
LDM850-1-9-15-P-1-13	850nm, spot laser, <1mW, Φ9x15mm,Plastic lens
LDM850-3-9-15-P-1-13	850nm, spot laser, <3mW, Φ9x15mm, Plastic lens
LDM850-1-9-19-G-1-13	850nm, spot laser, <1mW, Φ9x19mm, glass lens
LDM850-3-9-19-G-1-13	850nm, spot laser, <3mW, Φ9x19mm, glass lens

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.

Z-OPTICS LIMITED
12# Qiao Xia Nan Road, Bei Bai Xiang, Yue Qing,
Zhejiang Province, 325603 P. R. China
Tel: +86-577-8181-0885,
Web site: www.z-optics.com
E-mail: sales@z-optics.com