



450nm, Focus Adjustable Laser Module

<1mW, <5mW, <80mW

Blue laser, Spot beam, Focus Adjustable

Model: 450-A-9-40-G-1A-91

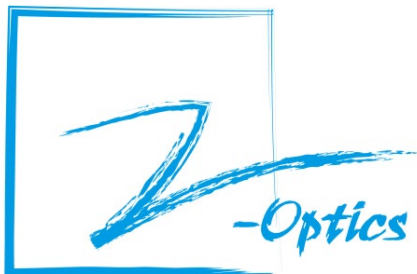
* A – power(mW)

Features:

- Blue dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable
- More wavelength with this design: 405~1600nm

Specifications:

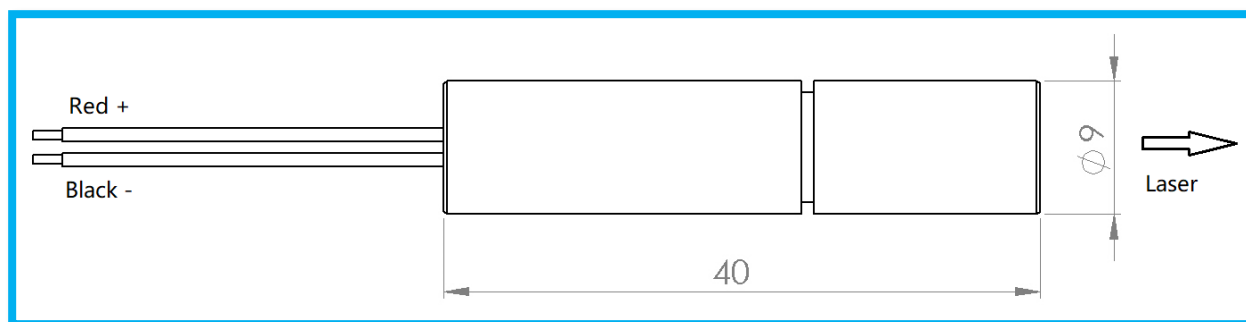
No	Parameters	Value
1	Peak Wavelength	450nm
2	Operation Voltage	3-5V, 7~9V, 12V
3	Operation Current	<250mA @ <5mW, 3~5V <100mA @ <5mW, 7~12V
4	Output Power	<1mW, <5mW, <80mW
5	Collimating Lens	Glass
6	Focus Range	1m ~ ∞ or customized
7	Operation Temperature *	-10 ℃ ~ +70 ℃
8	Storage Temperature	-40 ℃ ~ +85 ℃
9	Dimension	Φ9x40mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 ℃	10000hrs



450nm, Focus Adjustable Laser Module

<1mW, <5mW, <80mW

Blue laser, Spot beam, Focus Adjustable



Standard Products:

Part Number	Description
LDM450-A-9-40-G-1A-91	450nm, Spot Laser, $\Phi 9$ mm, Glass lens, Focus Adjustable

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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520nm, Focus Adjustable Laser Module

<1mW, <5mW, <80mW

Green laser, Spot beam, Focus Adjustable

Model: 520-A-9-40-G-1A-91

* A – power(mW)

Features:

- Green dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable
- More wavelength with this design: 405~1600nm

Specifications:

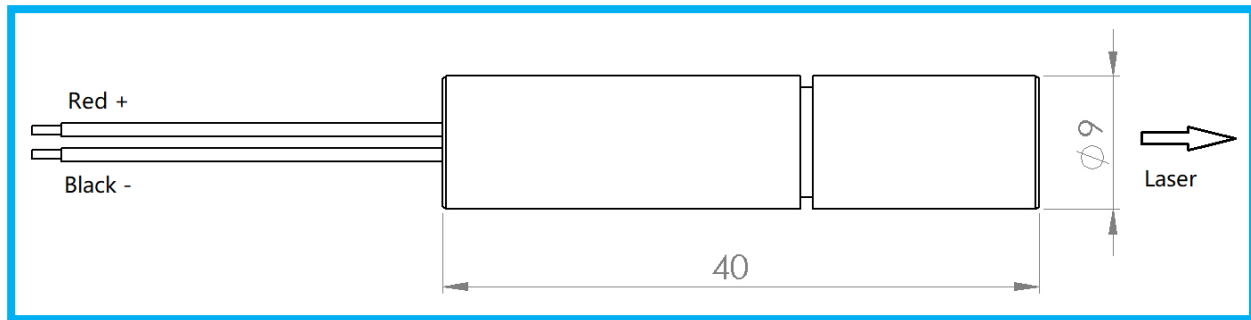
No	Parameters	Value
1	Peak Wavelength	520nm
2	Operation Voltage	3-5V, 7~9V, 12V
3	Operation Current	<250mA @ <5mW, 3~5V <100mA @ <5mW, 7~12V
4	Output Power	<1mW, <5mW, <80mW
5	Collimating Lens	Glass
6	Focus Range	1m ~ ∞ or customized
7	Operation Temperature *	-10 ℃ ~ +70 ℃
8	Storage Temperature	-40 ℃ ~ +85 ℃
9	Dimension	Φ9x40mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 ℃	10000hrs



520nm, Focus Adjustable Laser Module

<1mW, <5mW, <80mW

Green laser, Spot beam, Focus Adjustable



Standard Products:

Part Number	Description
LDM520-A-9-40-G-1A-91	520nm, Spot Laser, $\Phi 9$ mm, Glass lens, Focus Adjustable

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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635nm Focus Adjustable Laser Module

<1mW, <5mW

Red laser, Spot beam, Focus Adjustable

Model: 635-A-9-40-G-1A-91

* A – power(mW)

Features:

- Red dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable
- More wavelength with this design: 405~1600nm

Specifications:

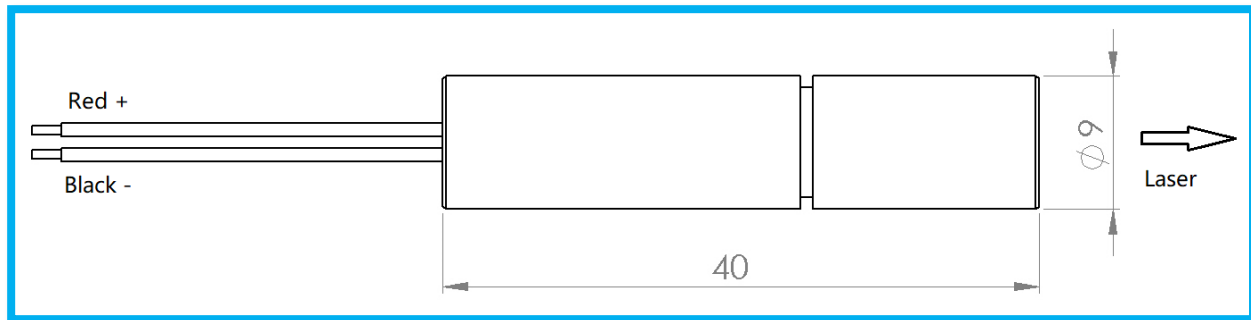
No	Parameters	Value
1	Peak Wavelength	635nm
2	Operation Voltage	2.6~6V
3	Operation Current	<40mA
4	Output Power	<1mW, <5mW
5	Collimating Lens	Glass
6	Focus Range	1m ~ ∞ or customized
7	Operation Temperature *	-10 ℃ ~ +50 ℃
8	Storage Temperature	-40 ℃ ~ +85 ℃
9	Dimension	Φ9x40mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 ℃	10000hrs



635nm Focus Adjustable Laser Module

<1mW, <5mW

Red laser, Spot beam, Focus Adjustable



Standard Products:

Part Number	Description
LDM635-A-9-40-G-1A-91	635nm, Spot Laser, $\Phi 9 \times 40$ mm, Glass lens, Focus Adjustable

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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635nm Laser Module

<1mW, <5mW, <10mW, <20mW

Red laser, Spot beam, Long Focus Adjustable

Model: LDM635-A-12-V-G-1A-8

* A – power(mW)

Features:

- Red dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable from 40mm ~ ∞ , or customized
- More wavelength with this design: All wavelength available

Specifications:

No	Parameters	Value
1	Peak Wavelength	635nm
2	Operation Voltage	3-6V
3	Operation Current	<35mA @ <1mW <40mA @ <3mW <65mA @ <7mW <85mA @ <20mW
4	Output Power	<1mW, <3mW, <7mW, <20mW
5	Collimating Lens	Glass
6	Focus Range	40mm ~ ∞ or customized
7	Operation Temperature *	-10 °C ~ +50 °C
8	Storage Temperature	-40 °C ~ +85 °C
9	Dimension	Diameter: 12mm Length focusing at 249mm: 35mm Length focusing at ∞ : 33mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 °C	5000hrs, 10000hrs

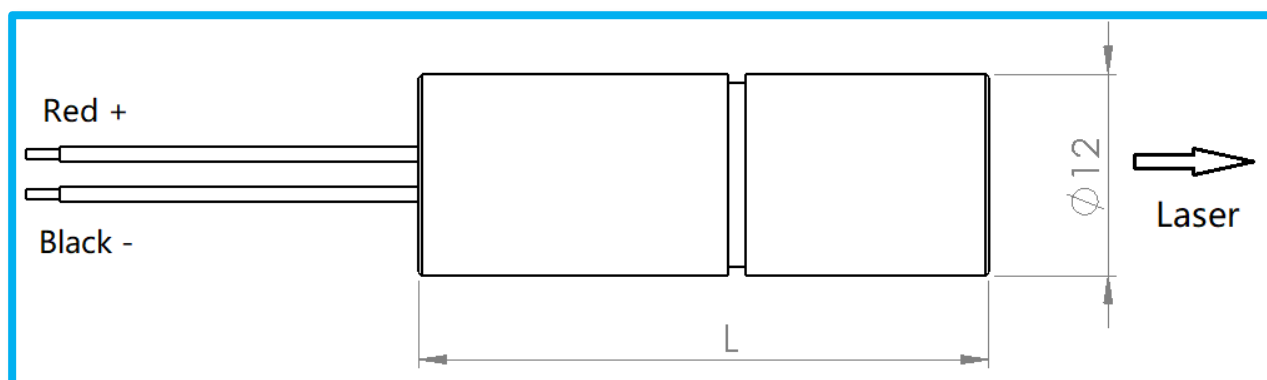
* 60 °C operation temperature product is available.



635nm Laser Module

<1mW, <5mW, <10mW, <20mW

Red laser, Spot beam, Long Focus Adjustable



Standard Products:

Part Number	Description
LDM635-A-12-V-G-1A-8	635nm, Spot Laser, <5mW, Ø12mm, Glass lens, Focus Adjustable
LDM635-A-12-V-G-1A-8	635nm, Spot Laser, <20mW, Ø12mm, Glass lens, Focus Adjustable

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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650nm Focus Adjustable Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, Focus Adjustable

Model: 650-A-9-40-G-1A-91

* A – power(mW)

Features:

- Red dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable
- More wavelength with this design: 405~1600nm

Specifications:

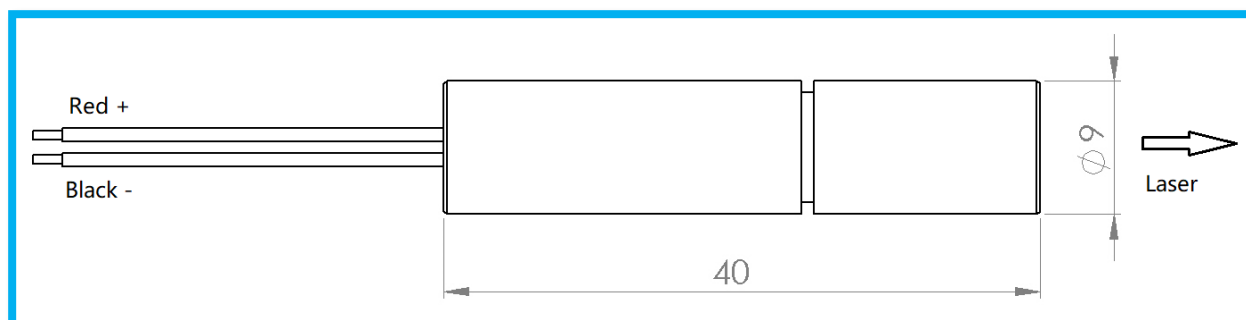
No	Parameters	Value
1	Peak Wavelength	650nm
2	Operation Voltage	2.6~6V
3	Operation Current	<25mA (<5mW) <40mA (<10mW)
4	Output Power	<1mW, <5mW, <10mW
5	Collimating Lens	Glass
6	Focus Range	1m ~ ∞ or customized
7	Operation Temperature *	-10 ℃ ~ +50 ℃
8	Storage Temperature	-40 ℃ ~ +85 ℃
9	Dimension	Φ9x40mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 ℃	10000hrs



650nm Focus Adjustable Laser Module

<1mW, <5mW, <10mW

Red laser, Spot beam, Focus Adjustable



Standard Products:

Part Number	Description
LDM650-A-9-40-G-1A-91	635nm, Spot Laser, $\Phi 9 \times 40$ mm, Glass lens, Focus Adjustable

Cautions

- Do not operate the device above the maximum rating condition, even momentarily. It may cause unexpected permanent damage to the device
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850nm Focus Adjustable Laser Module

<1mW, <5mW

IR laser, Spot beam, Focus Adjustable

Model: 850-A-9-40-G-1A-9

* A – power(mW)

Features:

- IR dot laser
- Auto power control (APC) driver. Laser output power keeps steady.
- Focus adjustable
- More wavelength with this design: 405~1600nm

Specifications:

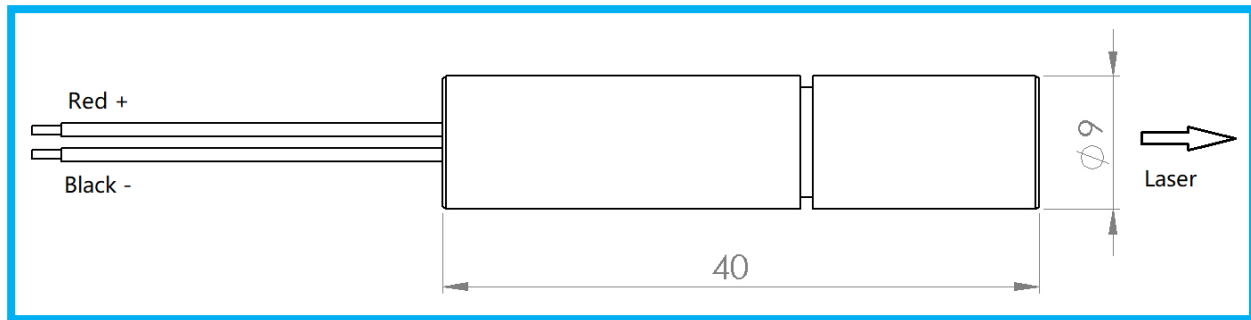
No	Parameters	Value
1	Peak Wavelength	850nm
2	Operation Voltage	2.6~6V
3	Operation Current	<30mA
4	Output Power	<1mW, <5mW
5	Collimating Lens	Glass
6	Focus Range	1m ~ ∞ or customized
7	Operation Temperature *	-10 ℃ ~ +50 ℃
8	Storage Temperature	-40 ℃ ~ +85 ℃
9	Dimension	Φ9x40mm
10	Housing	Brass or Anodized Aluminum
11	Mean time to failure(MTTF) 25 ℃	10000hrs



850nm Focus Adjustable Laser Module

<1mW, <5mW

IR laser, Spot beam, Focus Adjustable



Standard Products:

Part Number	Description
LDM850-A-9-40-G-1A-91	850nm, Spot Laser, $\Phi 9 \times 40$ mm, Glass lens, Focus Adjustable

Cautions

- Do not operate the device above the maximum rating condition, even momentarily. It may cause unexpected permanent damage to the device
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