

Infrared APC Laser Module

APCD-850-04-10-A&B

6-2D-LM85-000 rev.00

Φ10.5mm 850nm Laser Module

Features

APC (auto power control) IC inside
Low current consumption of the APC circuit
Surge current protection
High quality lens for output beam



Absolute maximum ratings

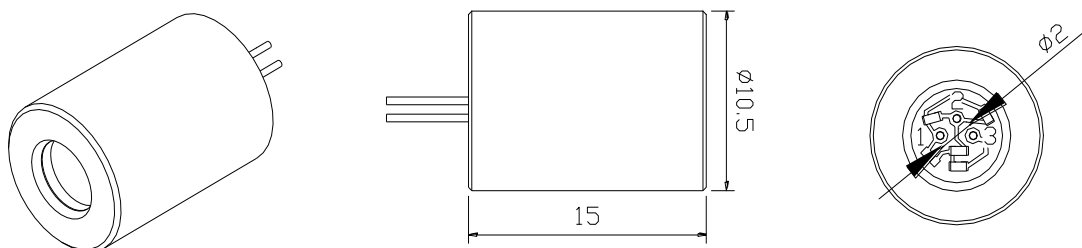
| Parameter | Symbol | Rating | Unit |
|-----------------------------------|------------------|--------|------|
| Power supply voltage | V _{cc} | 3.3 | V |
| Laser Module optical output power | P _o | <10 | mW |
| Operation temperature | T _{opr} | -5~50 | °C |
| Storage temperature | T _{stg} | -20~70 | °C |

Electrical and optical characteristics (T_c=25 °C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------------------|------------------|------|------|----------|------|---|
| Wavelength | λ | - | 845 | - | nm | P _o = 10mW |
| Operation current | I _{op} | - | - | 35 | mA | P _o = 10mW ; V _{cc} =3V |
| Optical output power | P _{out} | 8 | - | 10 | mW | |
| Operation voltage | V _{op} | 2.5 | - | 3.3 | Volt | |
| Laser Beam spot size at 10m | | | | <8mm | | |
| Divergence angle | | | | 0.9 mrad | | |

* Sufficient heat dissipation is required for CW operation.

Outline dimensions (Units: mm)



Aperture Size : 5mm

ARIMA LASERS CORP.

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E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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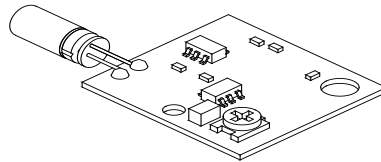
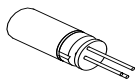
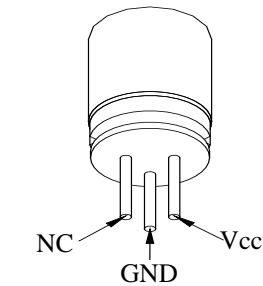
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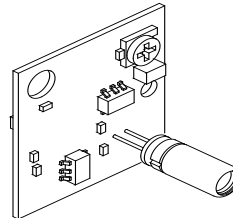
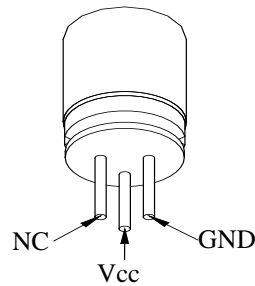
Instruction manual

DC Power connection mode 1

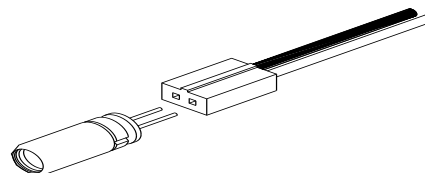
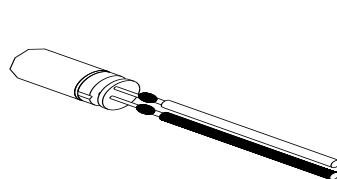
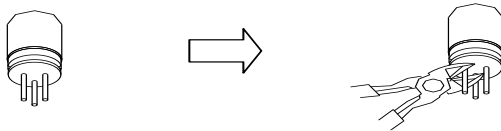
A type : Heat sink stand (-)



B type :Heat sink stand (+)



DC Power connection mode 2



● Precautions

- * Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- * Take precautions to avoid electrostatic discharge and/or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- * Proper heat sinking of the device assures stability and lifetime. Always ensure that maximum operating temperatures are not exceeded.
- * Observing visible or invisible laser beams with the human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- * No laser device should be used in any application or situation where life or property is at risk in event of device failure.
- * Specifications are subject to change without notice. Ensure that you have the latest specification by contacting us prior to purchase or use of the product.

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