

Infrared APC Laser Module

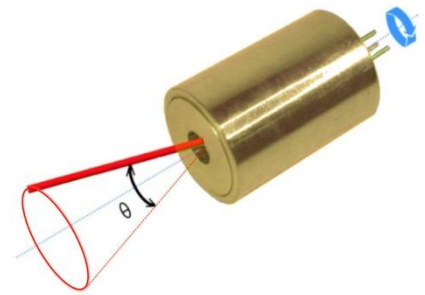
APCD-850-12-10-A&B

6-2D-LM85-000 Rev.00

Φ10.5mm 850nm Coaxial Laser Module

Features

- APC (auto power control) driver IC inside.
- 5mW output power.
- Output beam is aligned to the centre-line of the module.
- The tolerance of $\theta/2$ is $\pm 0.05^\circ$.



Absolute maximum ratings

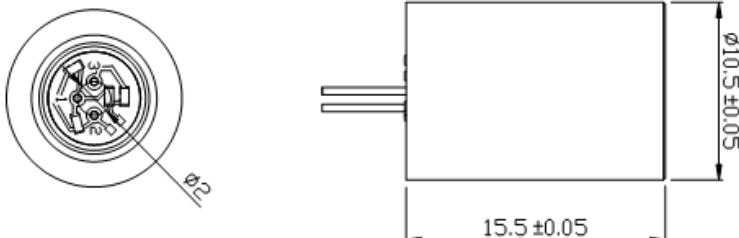
| Parameter | Symbol | Rating | Unit |
|-----------------------------------|------------------|--------|------|
| Power supply voltage | V _{cc} | 3.3 | V |
| Laser Module optical output power | P _o | <10 | mW |
| Operation temperature | T _{opr} | -5~40 | °C |
| Storage temperature | T _{stg} | -20~60 | °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} | - | 30 | 40 | mA | P _o = 10mW ; V _{cc} =3V |
| Optical output power | P _{out} | 8 | | 10 | mW | |
| Operation voltage | V _{op} | 2.8 | - | 3.3 | Volt | |
| Laser Beam spot size at 10m | | | | <15mm | | |
| Divergence angle | | | | 1.2 mrad | | |
| Coaxial precision | | | | < 0.2 degree | | |

* Sufficient heat dissipation is required for CW operation

Outline dimensions (Units:mm)



ARIMA LASERS CORP.

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

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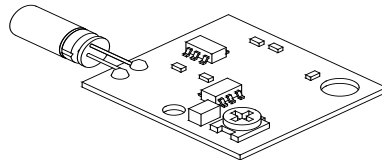
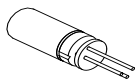
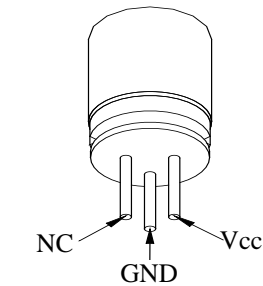
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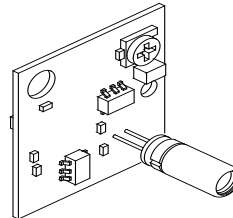
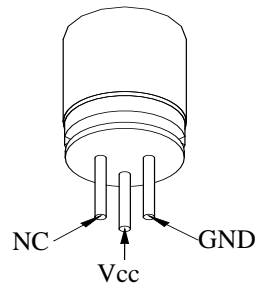
Instruction manual

DC Power connection mode 1

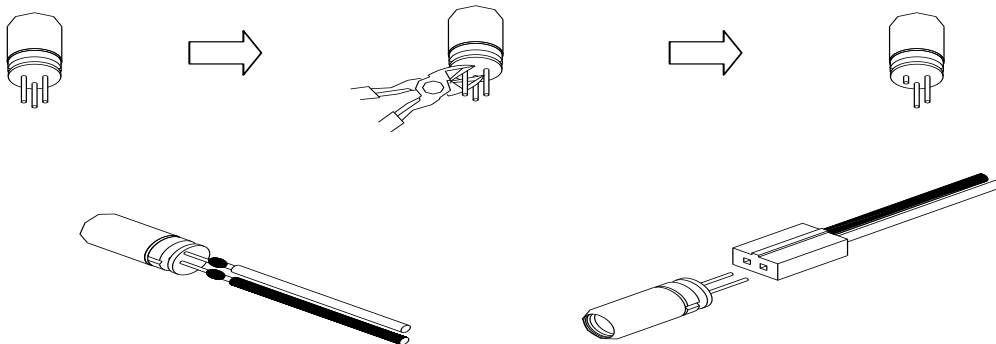
A type : Heat sink stand (-)



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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