

$\Phi 4\text{mm}$ 635nm Laser Module

$$P_o: < 1\text{mW}$$

Features

1. APC (auto power control) IC inside
2. Low current consumption of the APC circuit
3. Much smaller LD module
4. Surge current protection
5. High quality glass lens for output beam

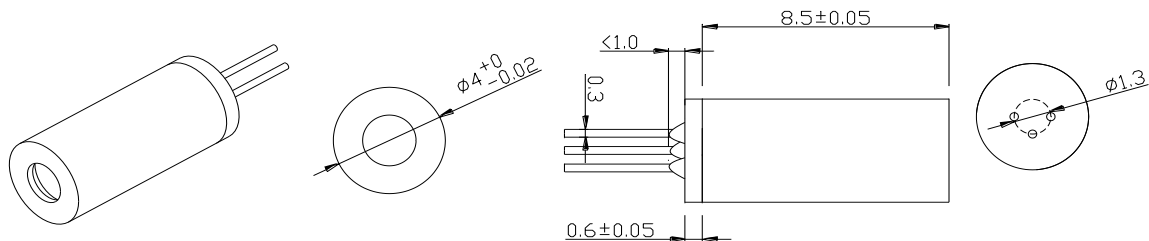
**Absolute maximum ratings**

Item	Symbol	Rating	Unit
Power supply voltage	V_{cc}	3.3	V
Laser Module optical output power	P_o	<1	mW
Operation temperature	T_{opr}	0~40	$^{\circ}\text{C}$
Storage temperature	T_{stg}	0~80	$^{\circ}\text{C}$

Electrical and optical characteristics ($T_c=25^{\circ}\text{C}$)

Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	630	635	640	nm	$P_o= 1\text{mW}$
Operation current	I_{op}	-	-	35	mA	$P_o= 1\text{mW}$ $V_{cc}=3\text{V}$
Operation voltage	V_{op}	2.5	-	3.3	Volt	
Laser Beam spot size at 10m		<20mm				
Divergence angle		2 mrad				

Notes : If laser module is operated without applicable heat sink , electrical and optical characteristics may be out of specifications.

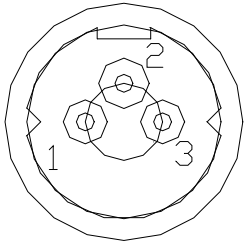
Outline dimensions (Units: mm)

Aperture Size : 1.3mm

Laser Safety Precautions

1. Do not look into the laser beam directly by eyes. The laser beam may cause severe damage to human eyes.
2. Optical Lens is made of plastic or glass. Do not contaminate lens by soiling, oil or chemical.

PIN Assignment:



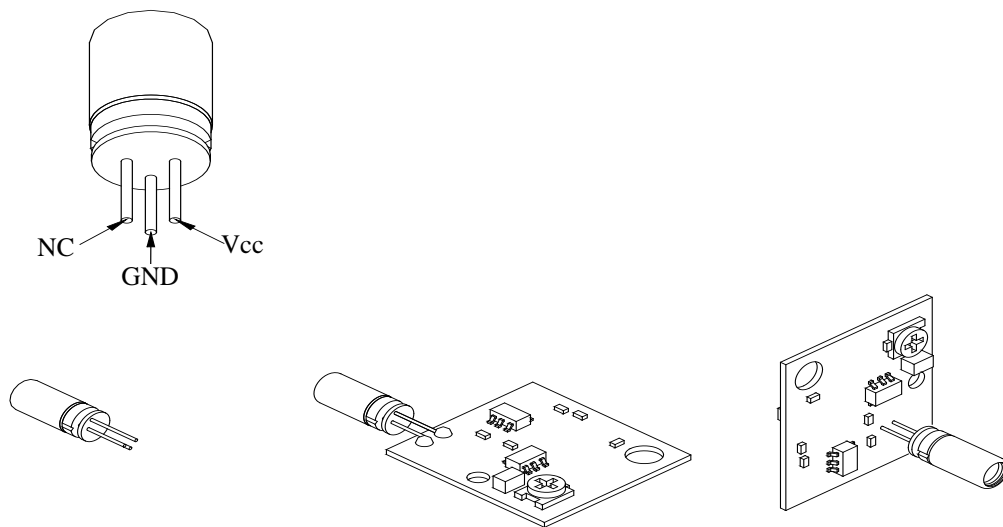
Pin 1 : Vcc

Pin 2 : GND

Pin 3 : NC (No external connection)

Instruction manual

1. DC Power connection mode 1



2. DC Power connection mode 2

