

# Laser Module LC-LMD-650-05

Ø 10.5 mm, 650 nm Laser Module

## Features

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

## Part No. Indications

LC-LMD – 650 – 05 – XX – A

Output Power:

01 - < 1 mW

05 - < 3 mW

0.39 - < 0.39 mW



## Part No. with 100 mm Flying Leads (1 mW Version only)

LC-LMD – 650 – 05 – 01 – A – C

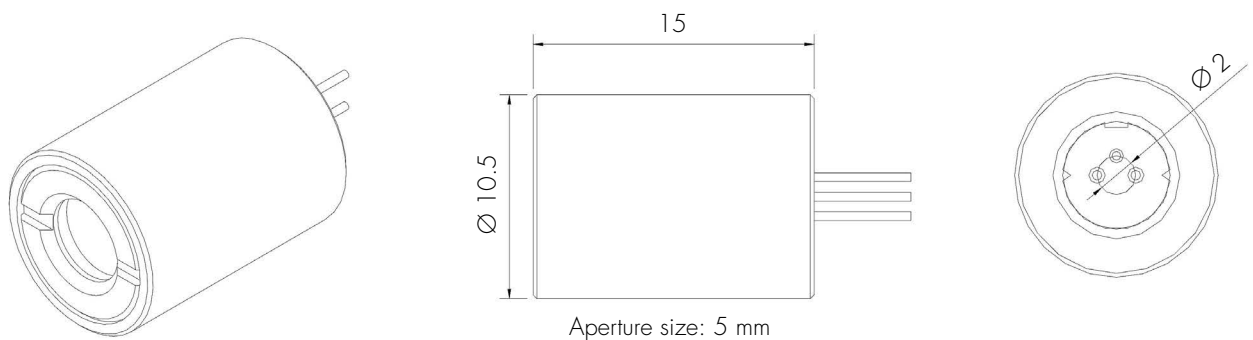
## Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	$V_{CC}$	3.3	V
Laser module optical output power	$P_o$	01	< 1
		05	< 3
Operation temperature	$T_{opr}$	-5 ~ 50	°C
Storage temperature	$T_{stg}$	-20 ~ 70	°C

### Electrical and Optical Characteristics ( $T_c = 25\text{ }^\circ\text{C}$ )

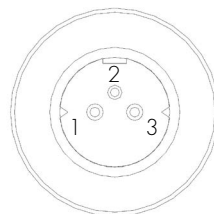
Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	$\lambda$	01	655	-	nm	$P_o = 1\text{ mW}$
		05				$P_o = 3\text{ mW}$
Operation current	$I_{op}$	-	-	30	mA	$P_o = 1\text{ mW}$ $V_{cc} = 3\text{ V}$
				35		$P_o = 3\text{ mW}$ $V_{cc} = 3\text{ V}$
Operation voltage	$V_{op}$	2.5	-	3.3	Volt	
Laser beam spot size at 10 m	< 8 mm					
Divergence angle	0.9 mrad					
Mean time to failure (MTTF) 25 °C	>10000 hrs					

### Outline Dimensions (Units: mm)



### Pin Assignment

Pin 1:  $V_{cc}$   
Pin 2: GND  
Pin 3: NC



A type: Heat sink stand (-)