

## Laser Module LC-LMD-650-17

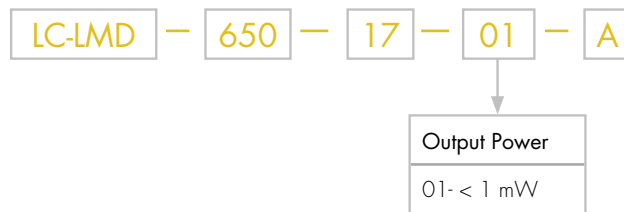
Ø 3.3 mm, 650 nm Laser Module

### Features

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



### Part No. Indications



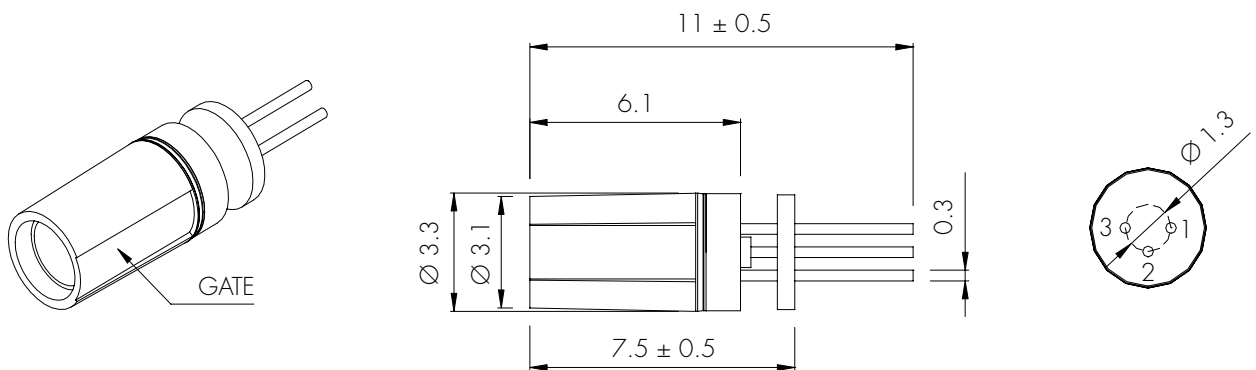
### Absolute Maximum Ratings

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	°C
Storage temperature	$T_{stg}$	0 ~ 60	°C

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

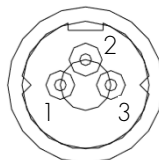
Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	$\lambda$	-	655	-	nm	$P_o = < 1\text{ mW}$
Output power	$P_{out}$ 01	0.4	-	0.9	mW	$V_{cc} = 3\text{ V}$
Operation current	$I_{op}$	-	-	35	mA	$P_o = 1\text{ mW}$ $V_{cc} = 3\text{ V}$
Operation voltage	$V_{op}$	2.5	-	3.3	Volt	
Laser beam spot size at 10 m				< 20 mm		
Divergence angle				2 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 (-)