

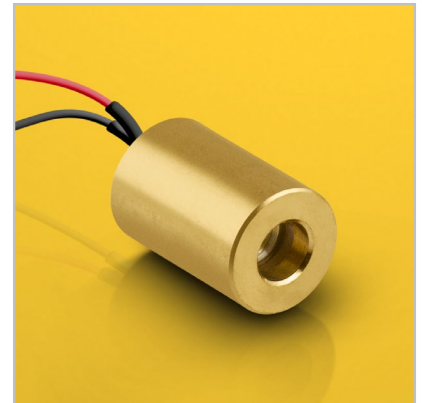
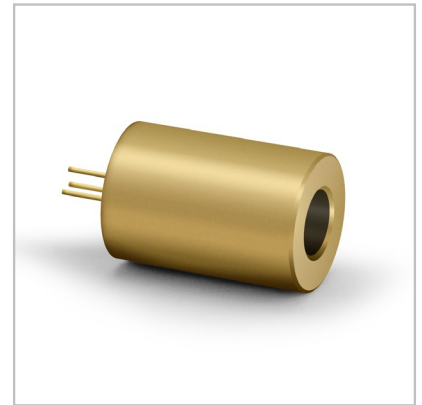
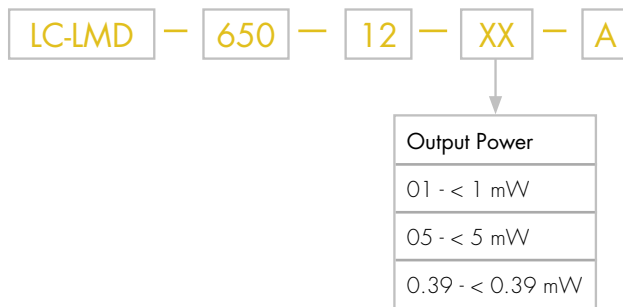
Laser Module LC-LMD-650-12

Laser Module Coaxial Aligned Ø 10.5 mm, 650 nm

Features

1. APC (auto power control) IC inside
2. The output beam is aligned to the centre-line of the module.
The tolerance of $\theta / 2$ is $\pm 0.05^\circ$. It is a special purpose, reliable visible laser module and features in small size and easy operation.

Part No. Indications



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



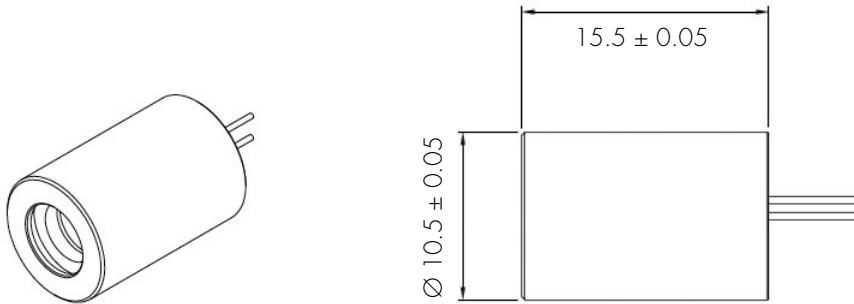
Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	V_{CC}	3.3	V
Laser module optical output power	P_o	01	< 1
		05	< 5
Operation temperature	T_{opr}	-5 ~ 40	°C
Storage temperature	T_{stg}	-20 ~ 60	°C

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

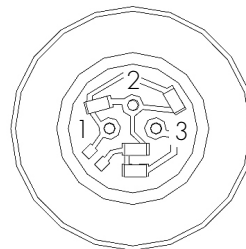
Item	Symbol	Min.	Typ.	Max	Unit	Condition	
Wavelength	λ	01	-	655	-	nm	$P_o = 1\text{ mW}$
		05					$P_o = 4.5\text{ mW}$
Output power	P_{out}	01	0.5	-	0.9	mW	
		05	2	4.5	5		
Operation current	I_{op}	01	-	30	40	mA	$P_o = 1\text{ mW } V_{cc} = 3\text{ V}$
		05					$P_o = 4.5\text{ mW } V_{cc} = 3\text{ V}$
Operation voltage	V_{op}	2.8	-	3.3	Volt		
Laser beam spot size at 10 m							< 15 mm
Divergence angle							1.2 mrad
Coaxial precision							$\theta < 0.1$ degree
Mean time to failure (MTTF) 4.5 mW 25 °C							>10000 hrs

Outline Dimensions (Units: mm)



Pin Assignment

- Pin 1: V_{cc}
- Pin 2: GND
- Pin 3: NC (no external connection)



A type: Heat sink stand (-)