

# Laser Module

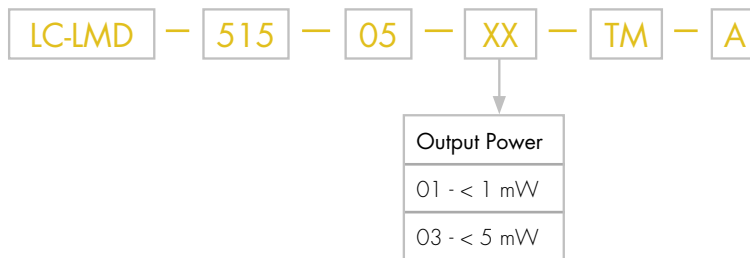
## LC-LMD-515-05-TM

Ø 10.5 mm, 515 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

### Part No. Indications



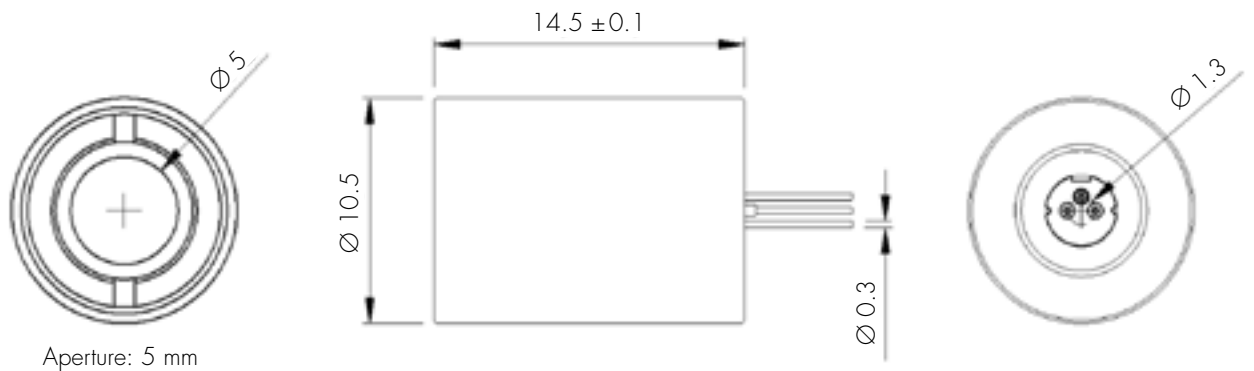
### Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	$V_{CC}$	7	V
Laser module optical output power	P <sub>o</sub>	01	< 1
		03	< 5
Operation temperature	T <sub>opr</sub>	0 ~ 60	°C
Storage temperature	T <sub>stg</sub>	0 ~ 85	°C

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

Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	$\lambda$	510	520	530	nm	$P_o = 0.8\text{ mW}$
Operation current	$I_{op}$	-	-	100	mA	$P_o = 0.8\text{ mW}$ $V_{cc} = 6\text{ V}$
Optical output power	$P_{out}$	01	0.5	0.9	mW	
		03	2	4		
Operation voltage	$V_{op}$	-	6	6.5	Volt	
PWM control mode	PWM	100		2000	KHz	Add 10 uf capacitance Duty cycle = 50%
laser beam spot size at 10 m						< 13 mm
Divergence angle						1.3 mrad

Outline Dimensions (Units: mm)



Pin Assignment

- Pin 1:  $V_{cc}$
- Pin 2: GND
- Pin 3: PWM



CW mode



PWM mode

