

Laser Module

LC-LMD-635-02

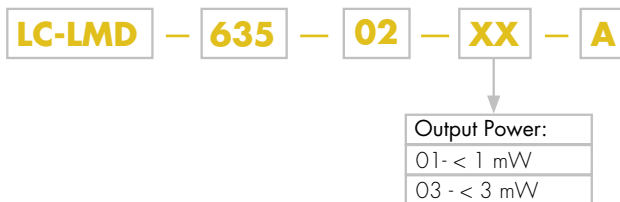
Ø 6.2 mm 635 nm Laser Module

Features

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



Part No. Indications



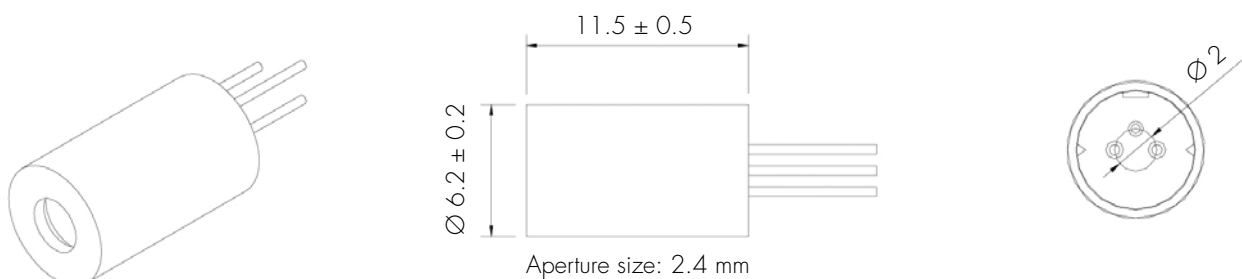
Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	V_{CC}	3.3	V
Laser module optical output power	P_o 01	< 1	mW
	03	< 3	
Operation temperature	T_{opr}	0 ~ 40	°C
Storage temperature	T_{slg}	0 ~ 60	°C

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

Item	Symbol		Min.	Typ.	Max.	Unit	Condition
Wavelength	λ	01	-	634	-	nm	$P_o = 1\text{ mW}$
		03					$P_o = 3\text{ mW}$
Operation current	I_{op}	01	-	-	50	mA	$P_o = 1\text{ mW}$ $V_{cc} = 3\text{ V}$
		03					$P_o = 3\text{ mW}$ $V_{cc} = 3\text{ V}$
Operation voltage	V_{op}		2.5	-	3.3	Volt	
Laser Beam spot size at 10 m	<10 mm						
Divergence angle	1.1 mrad						
Mean time to failure (MTTF) 2 mW 25 °C	>5000 hrs						

Outline Dimensions (Units: mm)

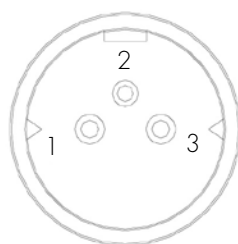


PIN Assignment

Pin 1: Vcc

Pin 2: GND

Pin 3: NC



A type: Heat sink stand (-)

Laser Module

LC-LMD-635-03

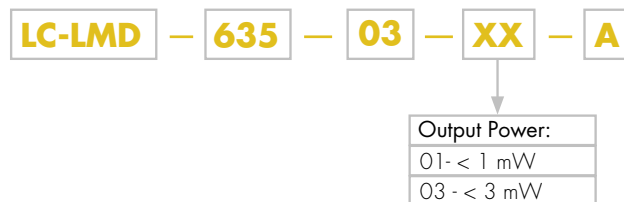
Ø 8 mm, 635 nm Laser Module

Features

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



Part No. Indications



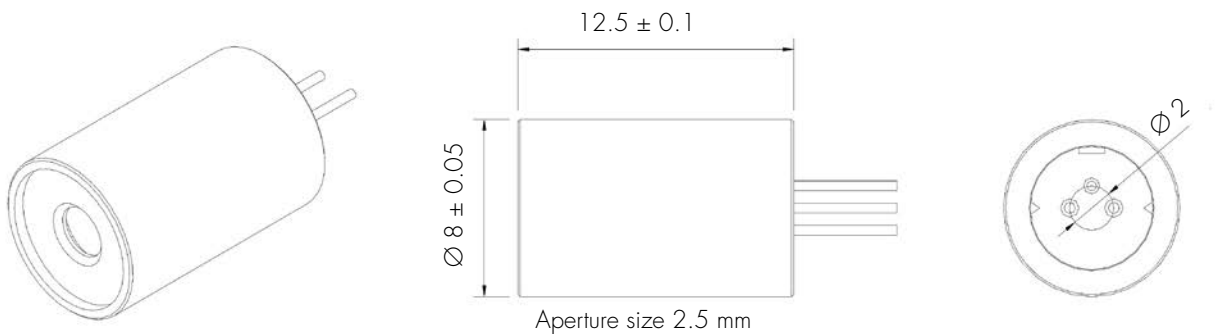
Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	V_{CC}	3.3	V
Laser module optical output power	P_o 01	< 1	mW
	02	< 3	
Operation temperature	T_{opr}	0 ~ 40	°C
Storage temperature	T_{stg}	0 ~ 60	°C

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

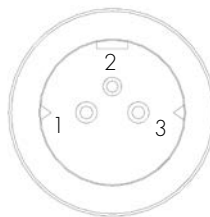
Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	01	634	-	nm	$P_o = 1\text{ mW}$
		03				$P_o = 3\text{ mW}$
Operation current	I_{op}	01	40	50	mA	$P_o = 1\text{ mW}$ $V_{cc} = 3\text{ V}$
		03				$P_o = 3\text{ mW}$ $V_{cc} = 3\text{ V}$
Operation voltage	V_{op}	2.5	-	3.3	Volt	
Laser beam spot size at 10 m	< 10 mm					
Divergence angle	1.1 mrad					
Mean time to failure (MTTF) 3 mW 25 $^{\circ}\text{C}$	01	>5000 hrs				

Outline Dimensions (Units: mm)



Pin Assignment

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



A type: Heat sink stand (-)

Laser Module

LC-LMD-635-05

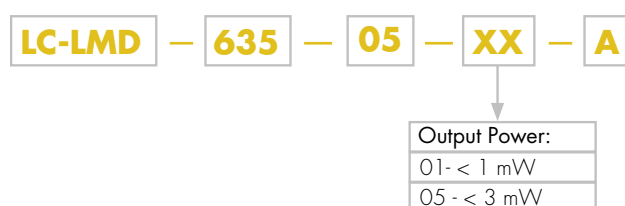
Ø 10.5 mm, 635 nm Laser Module

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



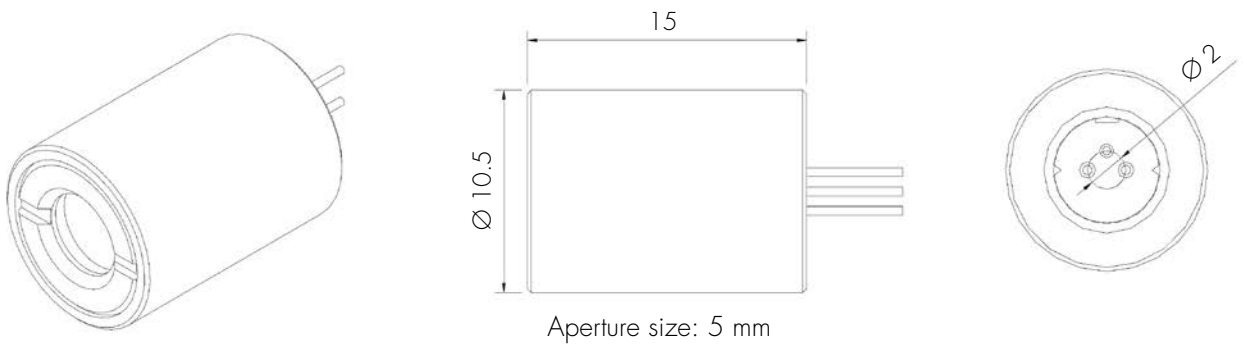
Absolute Maximum Ratings

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

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

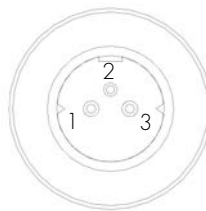
Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	01	634	-	nm	$P_o = < 1\text{ mW}$
		05				$P_o = < 3\text{ mW}$
Operation current	I_{op}	01	-	50	mA	$P_o = 1\text{ mW}$ $V_{cc} = 3\text{ V}$
		05				$P_o = 3\text{ mW}$ $V_{cc} = 3\text{ V}$
Operation voltage	V_{op}	2.5	-	3.3	Volt	
laser beam spot size at 10 m	< 8 mm					
Divergence angle	0.9 mrad					
Mean time to failure (MTTF) 3 mW 25 °C	> 5000 hrs					

Outline Dimensions (Units: mm)



Pin Assignment

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



A type: Heat sink stand (-)