



LDM650/5LJ

- Red Laser Diode Module
- 650 nm, <5 mW
- Adjustable Focus
- Automatic Power Control (APC)
- 3.0 – 5.0 VDC Input Voltage



Description

LDM650/5LJ is a small size diode laser module with a focusable lens, emitting at a wavelength of typically **650 nm**, and an optical output power of **< 5 mW (CW)**. It features automatic power control (**APC**) driving electronics for stable operation, and has been designed for 3-5 VDC supply voltage. A matching **power supply, holder and heat sink** is optionally available for quick setup (see page 3 for details).

Maximum Ratings (T_{CASE} = 25°C)

Parameter	Values		Unit
	Min.	Max.	
Operating temperature	- 10	+ 50	°C
Storage temperature	- 25	+ 85	°C

Electro-Optical Characteristics (T_{CASE} = 25°C)

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	640	650	665	nm
Optical Output Power (CW)			5	mW
Laser Class		3R		
Output Aperture		4		mm
Beam Diameter (@10 m)			8	mm
Beam Divergence		0.5		mrاد
Beam Shape		Elliptical		
Supply Voltage	3		5	VDC
Operating Current		20	30	mA
Body		Brass, black anodized		
Collimating Lens		Acryl		
Dimensions		Ø 12 x 30		mm
MTTF (@25°C)	10000			h

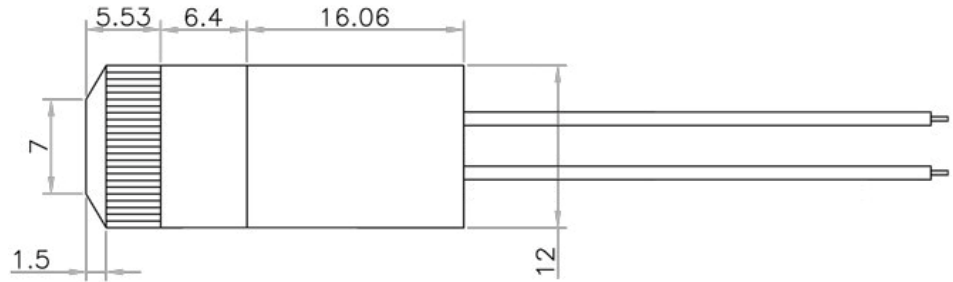
LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT



Outline/Connection

Lead	Description
Red	+VDC*
Black	GND

*module body is on +VDC potential



all dimensions in mm

Optional Accessories

Heat Sink SQ50x34

- Al, black anodized
- Clamping mechanism
- 50 x 50 x 34 mm
- 114 g



Holder RLM-1250

- Steel, black anodized
- Height, reach, tilt adjustable
- Fixture 360° turnable
- Max. diameter: 12.5 mm
- 69 x 67 mm
- 152 g



Power supply LPS31C

- 100-240VAC
- AC Europlug (CEE7/16)
- IEC 60130-10 Type A con.
- Output 3 VDC, max 1 A
- CE certified
- 30 x 80 x 75 mm
- 80 g



Precautions

Static Electricity:

Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser module.

Heat Sinking:

In order to maintain lifetime and stability of the laser module, efficient heat management is recommended.

Safety:

This laser module emits highly concentrated invisible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3R laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**.

