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LDM650/5LT

- **Red Laser Diode Module**
- **650 nm, <5 mW, APC**
- **Power adjustable**
- **Status LED**
- **Adjustable Focus**
- **3 Glass Lens, AR coated**

Description

LDM650/5LT is a small size diode laser module with a focusable 3-lens type AR coated glass collimator, designed for superior beam quality. It is emitting at a wavelength of typically **650 nm**, and an optical output power of **< 5 mW,** featuring automatic power control **(APC)** driving electronics, trim potentiometer for power adjustments, and a status LED. **LDM650/5LT** has been designed for 4.5-5 VDC supply voltage. A matching **power supply, and module holder** are optionally available for quick setup (see page 2 for details).

Maximum Ratings

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			**5**	**mW**
Beam Diameter (@ aperture)		4 x 2		mm
Beam Diameter (@10 m)			8	mm
Beam Divergence		0.5		mrad
Beam Shape		Elliptical		
Supply Voltage	**4.5**		**5**	**VDC**
Operating Current		30	50	mA
Body		Brass, black anodized		
Collimating Lens		3-lens type, glass, AR coated		
Dimensions		Ø 12.7 x 52.0		mm
MTTF (@25°C)	10000			h

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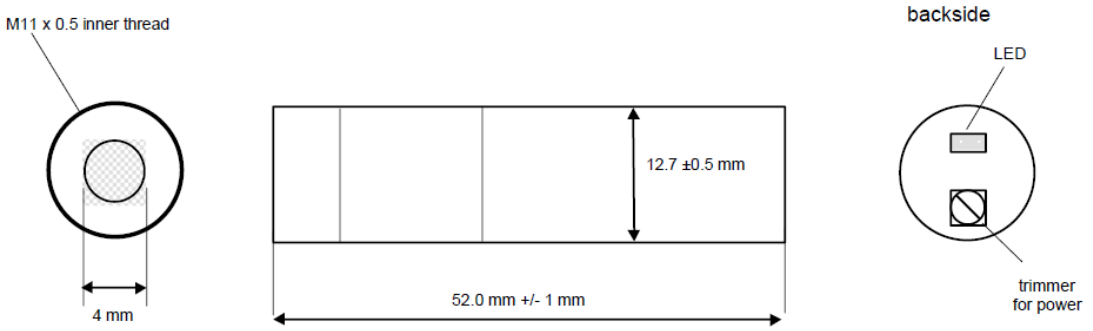
Outline / Connection

Module



all dimensions in mm

Connection

Lead	Description
Red	+VDC
Black	GND

- housing on + VDC
- length of leads: 10 cm

Optional Accessories

Power supply LPS51C

- **100-240VAC**
- **AC Europlug (CEE7/16)**
- **IEC 60130-10 Type A con.**
- **Output 5 VDC, max 1 A**
- **CE certified**
- **30 x 80 x 75 mm**
- **80 g**

Holder RLM-1650

- **Steel, black anodized**
- **Height, reach, tilt adjustable**
- **Fixture 360° turnable**
- **Max. diameter: 16.5 mm**
- **69 x 67 mm**
- **152 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**.