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LM-101-A4

- **650 nm Diode Laser Module**
- **Laser Class 2**
- **Automatic Power Control**
- **3 VDC Input Voltage**

RoHS COMPLIANT Pb Pb-Free

Description

LM-101-A is a small size, low cost, red diode laser module, emitting at a wavelength of typically **650 nm**, with an optical output power of **<1 mW**. It features automatic power control **(APC)** driving electronics for stable operation, and is designed for 3 VDC supply voltage.

Maximum Ratings (T_{CASE} = 25°C)

Parameter	Values		Unit
	Min.	Max.	
Operating temperature	+ 0	+ 40	°C
Storage temperature	- 25	+ 70	°C

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

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	645	650	660	nm
Output Power	**0.45**		**0.85**	**mW**
Output Aperture	3.5 x 1.7 (+/- 0.5)			mm
Beam size (@10 m)	10 - 15			mm
Supply Voltage	**2.8**		**3.4**	**VDC**
Operating Current		16	40	
Body	Brass			
Collimating Lens	Acryl			
Dimensions	Ø 8 x 11 (24)			mm
Leads	26 AWG PVC-Free			
MTTF		5000		h

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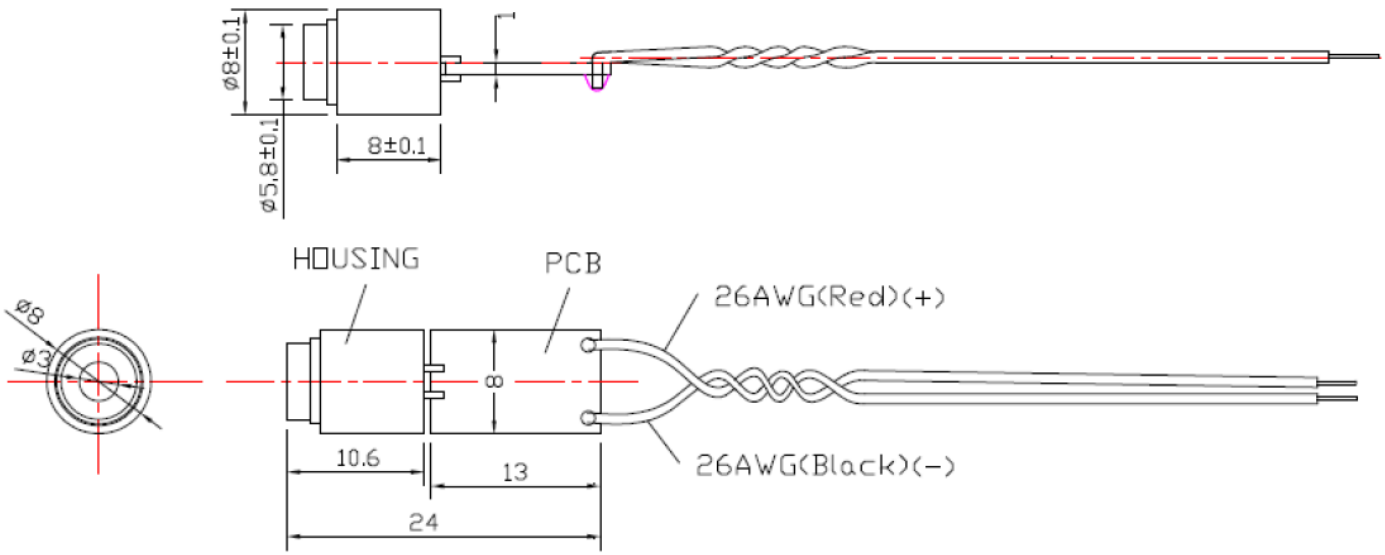
Outline Dimensions



all dimensions in mm

Electrical Connection

Lead	Description
Red	+VDC
Black	GND

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 diode it is essential to provide efficient heat management. For long time stable operation proper contact between laser module and heat sink is recommened.

Safety:

This laser module emits concentrated visible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 2 laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**.