

EEL M8

AL84600001

852nm 50~60mW

Stable light quality, good light uniformity. Short focal length, shorten the mechanism space, and make your product miniaturized. FPC is convenient for assembly and maintenance, flexible.

If you have other needs, please let us know and we will provide you with a suitable solution.



Feature

- Designed for industrial applications
- Rugged stainless steel housing and plastic lens

Application

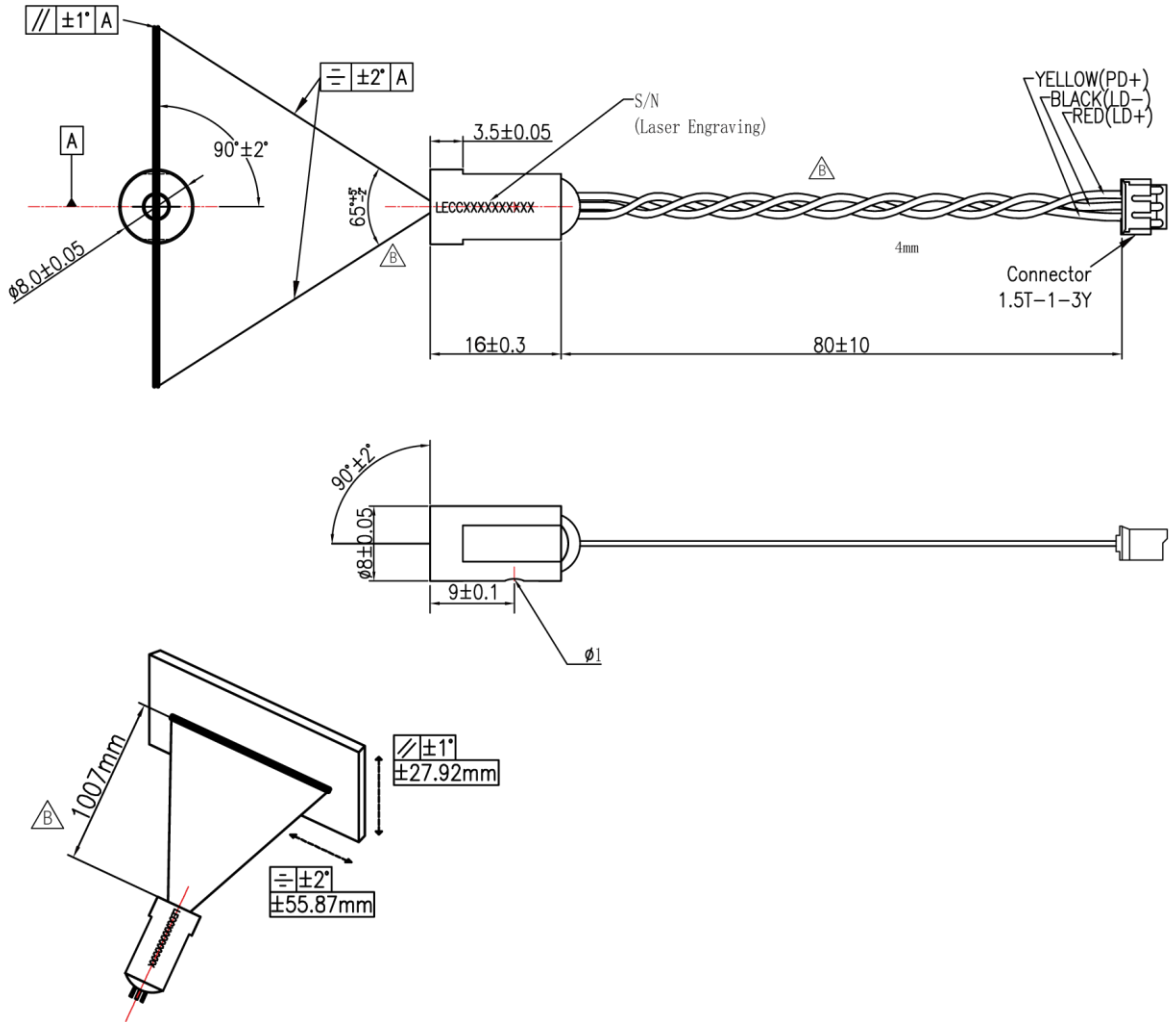
- Robot obstacle avoidance
- 3D measurement
- SLAM

Specification

Parameter	Symbol	Min.	Typical	Max.	Unit
CW Optical Power	P_O	50	55	60	mW
Operating Current	I_{OP}	-	-	180	mA
Monitor Current	I_M	0.1	0.4	1.0	mA
Operating Voltage	V_{OP}	-	2.4	2.8	V
Wavelength at Peak Emission	λ_p	842	852	862	nm
Operating Temp. Range	T_{OP}	-10	-	50	°C
Storage Temp. Range	T_{STG}	-30	-	70	°C
Line Size at 1007mm		-	-	5	mm
Driving Circuit	-				
Lens Material	Plastic Lens				

Mechanical Dimensions

1. Dimensional Drawing



EEL Series
SMD Series
VCSEL Series
Motorized Focal Length
Customization Series

[Cautions]

1. Absolute maximum ratings

The absolute maximum ratings which must not be exceeded even momentarily have been established for over driving laser operation reason such as COD. Exercise particular caution with respect to the drive voltage supply and static electricity.

2. Prevention of surge current and electrostatic discharge (ESD) and surge stress

Laser diode is sensitive device to ESD and surge, so even an extremely short time, Laser diode damaged with the strong light emitted. Use the power supply that was designed not to exceed the optical power output specified at the absolute maximum ratings.

We advise taking the following protective measures:

- Ground the device and circuits.
- When working with laser diodes wear anti-static clothing.
- Grounded wrist straps should always be worn while working with laser diodes.
- Use anti-static containers for transport and storage.
- Laser diode deterioration and damage can occur due to excessive current spikes when the power is turned on or off.

Design circuits to avoid the generating of excessive current spikes

3. Soldering

When soldering, please give attention to the mechanical stress and the temperature. Temperature of die-pad portion should be less than 160°C. It is recommended to radiate heat by putting heat sink on the package.

Soldering temperature and time : Iron temperature less than 180°C within 3sec (leads only)

4. Eye Safety

When the laser diode is in operation, looking into laser beam directly by naked eyes, even looking into through a lens, microscope, or optical fibers, may cause severe damage to human eyes. For observing laser beams, using safety goggles is recommended.

| LECC TECHNOLOGY CO., LTD.

2F No.2, Ziqiang 3rd Rd., Zhongli Dist., Taoyuan City, 320023, Taiwan.
TEL | 03 4511967 VAT Number | 16708380
FAX | 03 4511923 Email | sales@lecc.com.tw

| SHANGHAI LECC OPTO CO., LTD.

No.1939, Da Ye Rd., Feng-Xian Dist., Shanghai City, 201402, China.
TEL | 021 57407400 TAX Number | 913100007630197034
FAX | 021 57407403 Email | sales@lecc.com.tw