

## 830nm 1000mW 30°C Laser Diode in CoS (Chip-on-Submount) Package

Part No. LD830E1WK13

### FEATURES

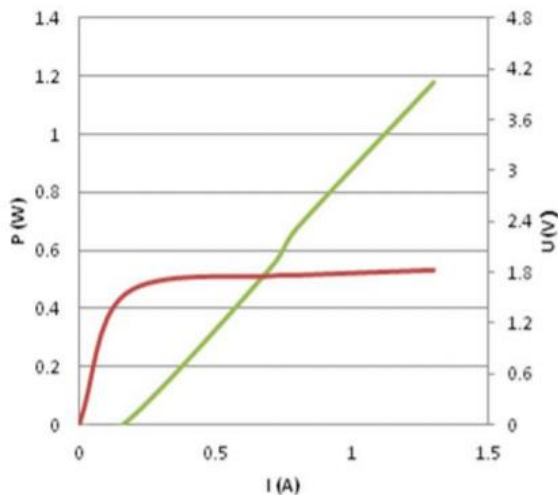
- 830nm 1W Fabry-Perot cavity semiconductor laser
- High power
- Package: CoS (Chip-on-Submount)

### SPECIFICATIONS (T<sub>c</sub> = 20°C)

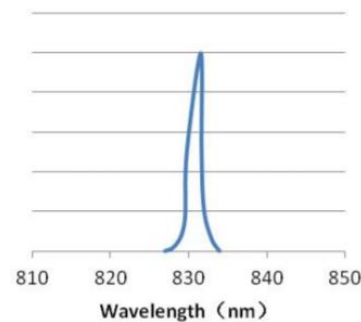
Item	Parameter	Typ.	Unit
Optical Parameter	Lasing wavelength	830±10	nm
	Output power	1	W
	Spectral width	≤3	nm
	Emitting area width	50	um
	Temperature coefficient	0.30	nm/°C
	Fast axis divergence	<40	deg
	Slow axis divergence	<10	deg
Electrical Parameter	Slope efficiency	≥1.03	W/A
	Threshold current	≤0.30	A
	Operating current	≤1.30	A
	Operating voltage	≤2.0	V
Others	Package	CoS (Chip-on-Submount)	-
	Operating temperature	15 to 30	°C
	Storage temperature	-40 to +60	°C
	Welding temperature	≤260	°C

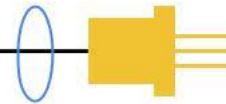
### TYPICAL CHARACTERISTICS

P-I-V Curve

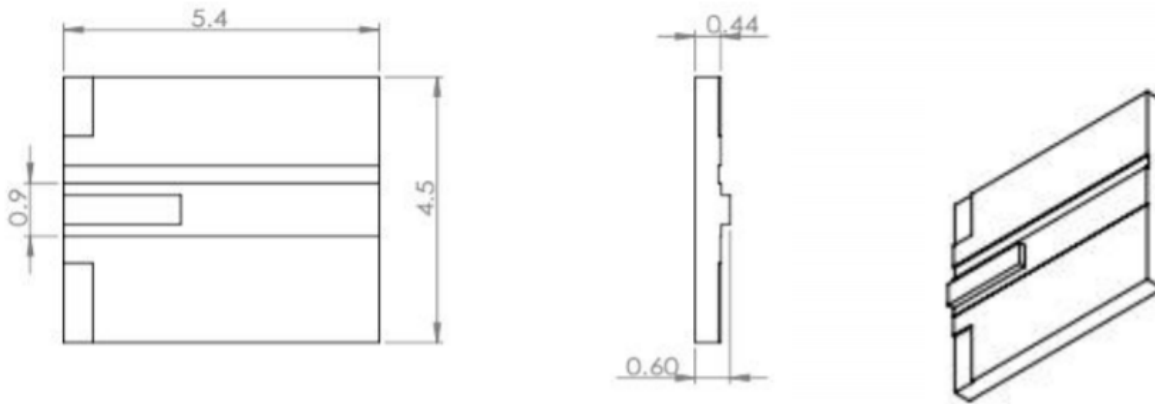


Spectral Curve





**MECHANICAL OUTLINE (unit: mm)**



**ADDITIONAL NOTES**

- Data in the sheet are based on C-mount package heat sink testing.
- Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- Take precautions to avoid electrostatic discharge and/or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- Proper heat sinking of the device assures stability and lifetime. Always ensure that maximum operating temperatures are not exceeded.
- Observing visible or invisible laser beams with human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- No laser device should be used in any application or situation where life or property is at risk in the event of device failure.
- Specifications are subject to change without notice. Ensure that you have the latest specification by contacting us prior to purchase or use of the product.