

## 980nm 2000mW 30°C Laser Diode in CoS (Chip-on-Submount) Package

Part No. LD980E2WK13

### FEATURES

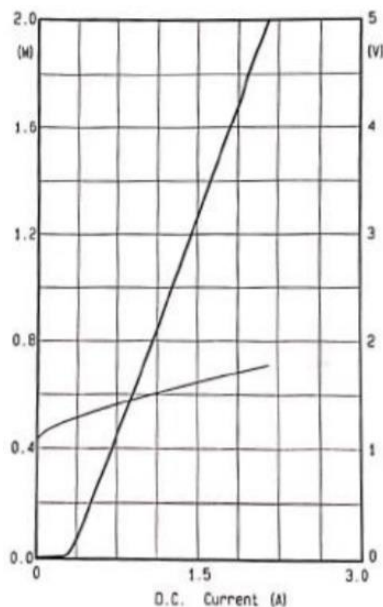
- 980nm 2W Fabry-Perot cavity semiconductor laser
- High power
- Package: CoS (Chip-on-Submount)

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

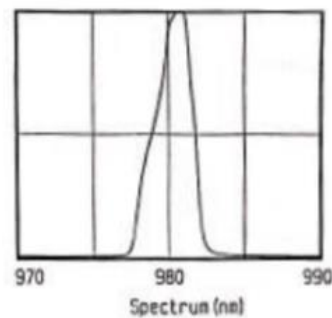
| Item                 | Parameter               | Typ.                   | Unit  |
|----------------------|-------------------------|------------------------|-------|
| Optical Parameter    | Lasing wavelength       | 980±10                 | nm    |
|                      | Output power            | 2                      | W     |
|                      | Spectral width          | ≤4                     | nm    |
|                      | Emitting area width     | 150                    | um    |
|                      | Temperature coefficient | 0.30                   | nm/°C |
|                      | Fast axis divergence    | <30                    | deg   |
|                      | Slow axis divergence    | <10                    | deg   |
| Electrical Parameter | Slope efficiency        | ≥1.0                   | W/A   |
|                      | Threshold current       | ≤0.5                   | A     |
|                      | Operating current       | ≤2.3                   | 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    |

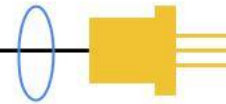
### TYPICAL CHARACTERISTICS

P-I-V Curve

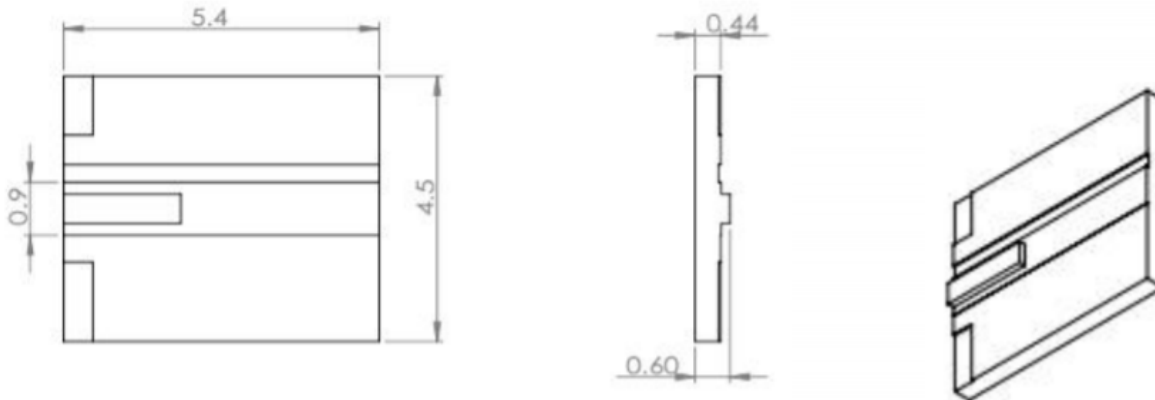


Spectral Curve





### 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.