

## 635nm 500mW FP Laser Diode in C-Mount Package

Part No. LD635D500G13

### FEATURES

- 635nm 500mW Fabry-Perot cavity semiconductor laser diode
- High output power
- Package: C-Mount

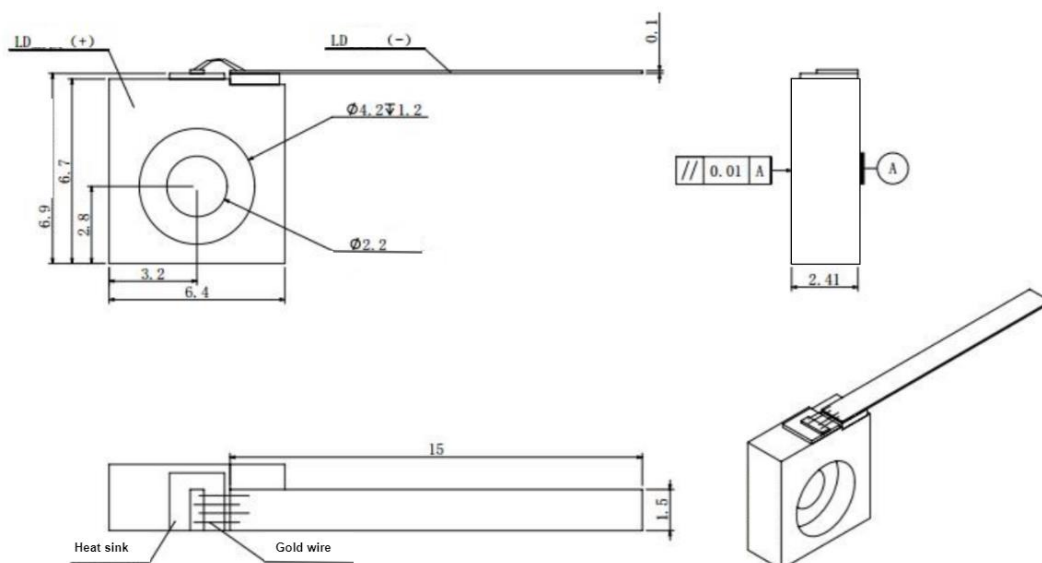
### APPLICATIONS

- Laser display
- PDT
- Biochemistry
- Military
- Medical / Life and Health sciences
- Illumination

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

| Item                 | Parameter               | Min.       | Typ. | Max. | Unit  |
|----------------------|-------------------------|------------|------|------|-------|
| Optical Parameter    | Lasing wavelength       | 625        | 635  | 645  | nm    |
|                      | Output power            | -          | 500  | -    | mW    |
|                      | Spectral width          | -          | 1.0  | 2.0  | nm    |
|                      | Emitting area width     | -          | 150  | -    | um    |
|                      | Temperature coefficient | -          | 0.30 | -    | nm/°C |
|                      | Fast axis divergence    | -          | 34   | 38   | deg   |
|                      | Slow axis divergence    | -          | 7    | 10   | deg   |
| Electrical Parameter | Slope efficiency        | 0.90       | -    | -    | W/A   |
|                      | Threshold current       | -          | 0.60 | 0.80 | A     |
|                      | Operating current       | -          | 1.15 | 1.35 | A     |
|                      | Operating voltage       | -          | 2.10 | 2.30 | V     |
| Others               | Package                 | C-Mount    |      |      | -     |
|                      | Operating temperature   | 10 to 30   |      |      | °C    |
|                      | Storage temperature     | -10 to +60 |      |      | °C    |

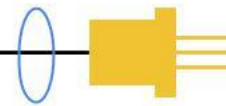
### MECHANICAL OUTLINE (unit: mm)



**Lasermate Group, Inc.**

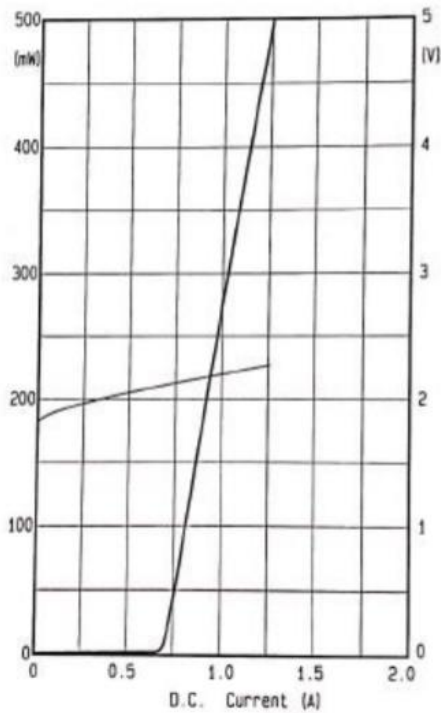
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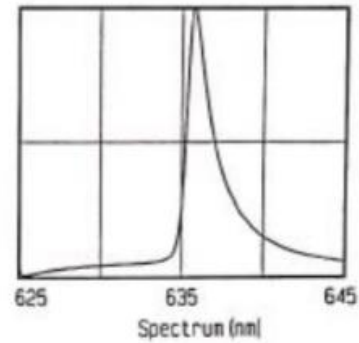


## TYPICAL CHARACTERISTICS

**P-I-V Curve**



**Spectral Curve**



## ADDITIONAL NOTES

- 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.