# 500mW 638nm Single Emitter Laser Chip

Laser Chip, also called unmounted diode laser bar, based on industry-leading semiconductor technology,; at output powers from 100mW to 600W. Wavelengths include 500~700nm, 880nm, 905-980nm, 1064nm, and 1400-1550nm. This single emitter laser chip is based on cw working mode and the 500mW output power.

**Feature**

Red light laser chip
CW working mode, high efficiency
High power and high beam intensity IR laser radiation
Low beam divergence and small light emitting aperture
Stable and reliable performance

**Application**

Lidar
Autonomous Driving Lidar
Wind Sensing Lidar
Fiber Laser Seeding


**Date sheet**

**Item No.:** LC638SE500
**Item Name:** 500mW 638nm Single Emitter Laser Chip

| Optical | Typ |
|---|---|
| Central Wavelength | 638nm |
| Output Power | 500mW |
| Working Mode | CW |
| Spectrum Width | 3nm |
| Emitter Width | 40um |
| Cavity Width | 300um |
| Cavity Length | 1500um |
| Thickness | 150um |
| Fast Axis Divergence(FWHM) | 35deg |
| Slow Axis Divergence (FWHM) | 10deg |
| Polarization Mode | TE |
| Slope Efficiency | 1.1W/A |
| Electrical | |
| Operating Current Iop | 1A |
| Threshold Current Ith | 0.2A |
| Operating Voltage Vop | 2.2V |
| Conversion Efficiency | 30% |
| Thermal | |
| Operating Temperature | 25 |
| Wavelength Temperature Coefficient | 0.25nm/ |

**Chart**