# 140W 905nm Single Emitter Diode Laser Chip

Brandnew Technology Company provide 140W 905nm Single Emitter Diode Laser Chips. With the development of unmanned driving, surveying and mapping detection and other applications, higher requirements are put forward for the test range and accuracy of lidar, and higher requirements are put forward for the power of laser transmitting chip. So according to the market demand, we provide 140W 905nm laser chip.

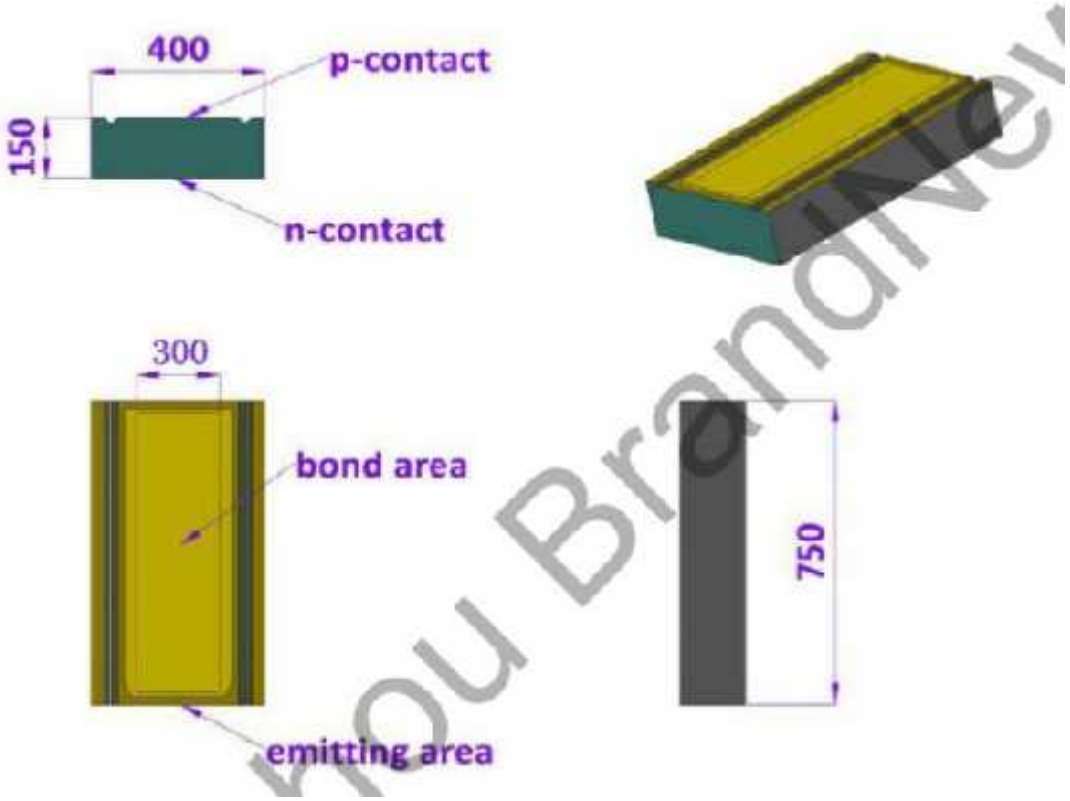

**Feature:**
QCW working mode, 905nm central wavelength, 140W output power
TE Polarization mode, 4.7W/A slope efficiency
300✖14um Emitter Width
With 200ns Pulse Width, 10% Duty Cycle

**Application:**
Laser Lidar
Medical application
Laser lighting
Free space optical communication.
Industrial pumping

**Data Sheet**
Item No: LC905SE140
Item Name: 140W 905nm Single Emitter Diode Laser Chip

| **Optical** | **Min** | **Typ** | **Max** |
|---|---|---|---|
| Central Wavelength | 890nm | 905nm | 920nm |
| Output Power | | 140W | |
| Working Mode | | QCW | |
| Spectrum Width | | 5nm | |
| Emitter Width | | 300*14um | |
| Chip Width | | 400um | |
| Thickness | | 150um | |
| Fast Axis Divergence(FWHM) | | 30deg | |
| Slow Axis Divergence (FWHM) | | 13deg | |
| Polarization Mode | | TE | |
| Slope Efficiency | | 4.7W/A | |
| **Electrical** | | | |
| Operating Current Iop | | 22A | 30A |
| Threshold Current Ith | | 0.8A | |
| Operating Voltage Vop | | 11V | 12V |
| Conversion Efficiency | | 41% | |
| Pulse Width | | 200um | |
| Duty Cycle | | 0.10% | |
| Repetition Frequency | | 5000Hz | |
| **Thermal** | | | |
| Operating Temperature | | 25℃ | |
| Wavelength Temperature Coefficient | | 0.31nm/℃ | |

**Drawing:**


400
p-contact
150
n-contact
300
bond area
750
emitting area