

High Power Single Emitter Diode Lasers, 945nm, 22W CW



Features:

- High output power
- High power conversion efficiency
- High brightness
- High reliability

Technical Advantages:

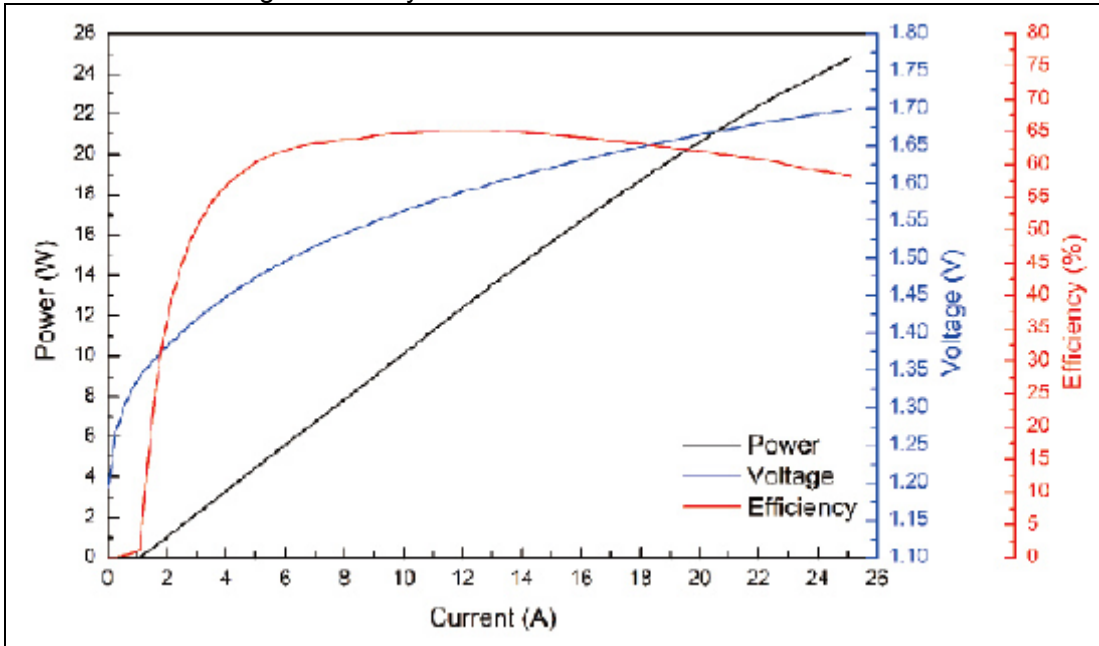
- High power and high efficient epitaxial design
- High-quality epitaxial material growth
- Special passivation method for cavity surface

Specifications

| | Symbol | Min. | Typical | Max. | Unit |
|---------------------------------------|-----------------|------|---------|------|-------|
| Operation | | | | | |
| Optical output power | P _o | | 22 | | W |
| Wavelength | λ _o | 935 | 945 | 955 | nm |
| Operation mode | | | CW | | |
| Dimensions | | | | | |
| Emission region width | E.W. | 185 | 190 | 195 | um |
| Cavity length | L | 4995 | 5000 | 5005 | um |
| Width | W | 395 | 400 | 405 | um |
| Thickness | D | 140 | 145 | 150 | um |
| Electro-optical parameters | | | | | |
| Electro-optical efficiency | η | 59 | 60.5 | | % |
| Slope efficiency | SE | 1.05 | 1.11 | | W/A |
| Threshold efficiency | l _{th} | | 1.2 | 1.3 | A |
| Operation current | I _{op} | | 21.5 | 23.5 | A |
| Operation voltage | V _{op} | | 1.7 | 1.8 | V |
| Spectral width FWHM | Δλ | | 3 | 3.5 | nm |
| Wavelength shift vs. temp. | Δλ/ΔT | | 0.35 | | Nm/°C |
| Vertical far field divergence angle | θ _⊥ | | 30.5 | 32.5 | Deg |
| Horizontal far field divergence angle | θ _∥ | | 8.5 | 9.5 | Deg |
| Polarization | TE | 95 | | | % |

Remark: Tested with COS packaged products in the CW mode at 25 °C.

Current-Power-Voltage-Efficiency



Spectral Characteristics

