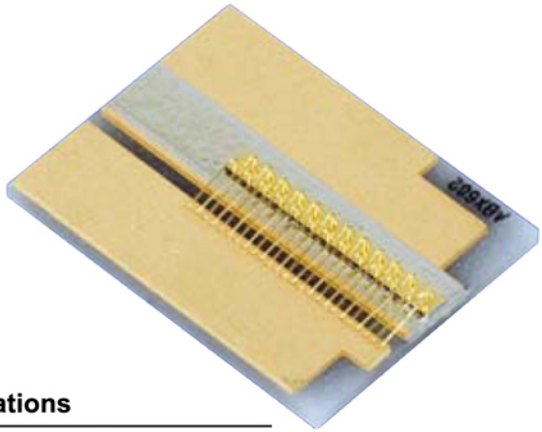
JDSU



# 63系列 二極體雷射

## Diode Lasers, High Brightness
## 10 W, 9xx nm - 63xx Series

### Key Features

- 100 µm emitter width
- High-efficiency, MOCVD quantum well design
- High reliability

### Applications

- Fiber laser pumping
- Medical/ophthalmic applications
- Beacons/illumination

### Electro-optical Specifications

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| **Laser Characteristics** | | | | | |
| CW output power | $P_o$ | – | – | 10 | W |
| Center wavelength and tolerance | $\lambda_c$ | | 921 (±10)<br>945 (±10)<br>981 (±10) | | nm |
| Spectral width | $\Delta\lambda$ | – | 3.5 | – | nm |
| Slope efficiency | $\eta d = P_o/(I_{op}-I_{th})$ | – | 1 | – | W/A |
| Conversion efficiency | $\eta = P_o/(I_{op}V_{op})$ | – | 55 | – | % |
| Emitting dimensions | W x H | – | 100 x 1 | – | µm |
| FWHM beam divergence | | | | | |
| Parallel to junction | $\theta_{//}$ | – | 8 | – | degrees |
| Perpendicular to junction | $\theta_{\perp}$ | – | 27 | – | degrees |
| Threshold current | $I_{th}$ | – | 0.55 | 0.8 | A |
| Operating current | $I_{op}$ | – | 11 | 12 A | A |
| Operating voltage | $V_{op}$ | – | 1.8 | 2.3 | V |
| Series resistance | $R_s$ | – | 0.03 | – | Ω |
| Thermal resistance | $R_{th}$ | – | 2.5 | – | °C/W |
| Recommended case temperature | $T_c$ | 15 | – | 30 | °C |
| **Absolute Maximum and Minimum Ratings** | | | | | |
| Reverse voltage | $V_r$ | – | – | 2 | V |
| Case operating temperature | $T_{op}$ | -20 | – | 50 | °C |
| Storage temperature range | $T_{stg}$ | -40 | – | 80 | °C |
| Lead soldering temperature | $T_{ls}$ | – | – | 250 (5 sec.) | °C |

* Typical value at 25°C and 0.6 NA collection optics

| Part Number | Power | Wavelength | Package |
|---|---|---|---|
| 63-00352 | 10 W | 981 (± 10) nm | LX submount |
| 63-00355 | 10 W | 945 (± 10) nm | LX submount |
| 63-00354 | 10 W | 921 (± 10) nm | LX submount |


244 新北市林口區仁愛路二段309號10樓
Tel : 886-2-2608-8096(台北) / Tel : 86-21-6248-3333(上海) / Fax : 886-2-2608-8092
E-mail : sales@rapi-tech.com.tw www.rapi-tech.com