

# DoGain

## High-Brightness Single Emitter Diode Lasers, 915nm, 15W cw

### 915nm 15W高亮度单管激光芯片

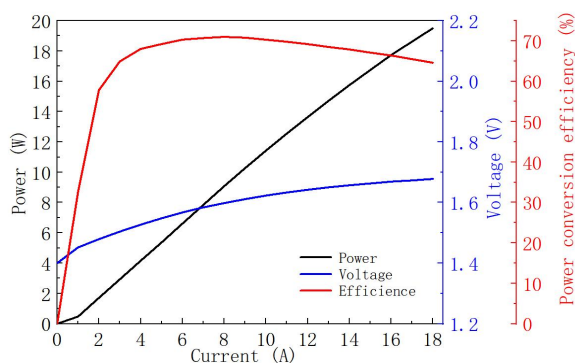
### DG-UMC-100-915-TE-15-4.5

| 性能参数<br>Performance parameters                  | 符号<br>Symbol             | 最小值<br>Minimum | 典型值<br>Typical | 最大值<br>Maximum | 单位<br>Unit    |
|-------------------------------------------------|--------------------------|----------------|----------------|----------------|---------------|
| <b>Operation</b>                                |                          |                |                |                |               |
| 输出功率 Optical output power                       | Po                       |                | 15             |                | W             |
| 中心波长 Wavelength                                 | $\lambda_c$              | 905            | 915            | 925            | nm            |
| 冷波长@2A Wavelength@2A                            |                          | 900            | 905            | 910            | nm            |
| 工作模式 Operation mode                             |                          |                | CW             |                |               |
| <b>Geometrical</b>                              |                          |                |                |                |               |
| 发光区宽度 Emittier width                            | E.W.                     | 95             | 100            | 105            | $\mu\text{m}$ |
| 腔长 Cavity length                                | L                        | 4495           | 4500           | 4505           | $\mu\text{m}$ |
| 宽度 Width                                        | W                        | 395            | 400            | 405            | $\mu\text{m}$ |
| 厚度 Thickness                                    | D                        | 135            | 145            | 155            | $\mu\text{m}$ |
| <b>Electro Optical Data</b>                     |                          |                |                |                |               |
| 电光转换效率 Electro-optic conversion efficiency      | $\eta_c$                 | 62             | 68             |                | %             |
| 斜率效率 Slope efficiency                           | SE                       | 1.1            | 1.2            |                | W/A           |
| 阈值电流 Threshold current                          | I <sub>th</sub>          |                | 0.65           | 1.2            | A             |
| 工作电流 Operating current                          | I <sub>op</sub>          |                | 13.5           | 16             | A             |
| 工作电压 Operating voltage                          | V <sub>op</sub>          |                | 1.65           | 1.8            | V             |
| 光谱宽度 Spectral width (FWHM)                      | $\Delta\lambda$          |                | 3              | 5              | nm            |
| 波长温度系数 Wavelength temperature coefficient       | $\Delta\lambda/\Delta T$ |                | 0.35           |                | nm/°C         |
| 水平远场发散角 (95%E) Horizontal F.F. divergence angle | $\theta_{//}$            |                | 7              | 9              | Deg           |
| 垂直远场发散角 (95%E) Vertical F.F. divergence angle   | $\theta_{\perp}$         |                | 48             | 52             | Deg           |
| TE 偏振度 TE Polarization                          |                          | 95.0           | 96.5           |                | %             |

备注：本参数为产品进行COS封装，CW电流模式，导热板25°C下条件下的测试参数。

Note: These parameters were obtained by testing COS packaged products in the CW mode at 25°C.

Power-Current-Voltage-Efficiency



Spectral characteristics

