

# DoGain

## High Power Diode Lasers Bars, 808 nm, 50W CW

### 808nm 50W 高功率巴条激光芯片

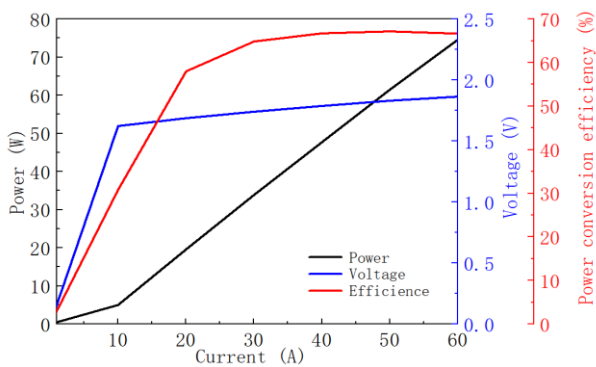
#### DG-UMB-30-19-808-TE-50-1.0

| 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                       | P <sub>o</sub>  |                | 50             |                | W          |
| 中心波长 Wavelength (cw)                            | λ <sub>c</sub>  | 798            | 808            | 818            | nm         |
| 工作模式 Operation mode                             |                 |                | CW             |                |            |
| <b>Geometrical</b>                              |                 |                |                |                |            |
| 发光单元数 Number of Emitters                        |                 |                | 19             |                |            |
| 发光区宽度 Emission region width                     | E.W.            | 145            | 150            | 155            | μm         |
| 发光点周期 Emitter Pitch                             | P               |                | 500            |                | μm         |
| 填充因子 Filling Factor                             | F               |                | 30             |                | %          |
| 巴条长度 Bar Width                                  | B               | 9800           | 10000          | 10200          | μm         |
| 腔长 Cavity length                                | L               | 980            | 1000           | 1020           | μm         |
| 厚度 Thickness                                    | D               | 105            | 115            | 125            | μm         |
| <b>Electro Optical Data</b>                     |                 |                |                |                |            |
| 电光转换效率 Electro-optic conversion efficiency      | η <sub>c</sub>  | 62             | 65             |                | %          |
| 斜率效率 Slope efficiency                           | SE              | 1.2            | 1.3            |                | W/A        |
| 阈值电流 Threshold current                          | I <sub>th</sub> |                | 6              | 7              | A          |
| 工作电流 Operating current                          | I <sub>op</sub> |                | 50             | 52             | A          |
| 工作电压 Operating voltage                          | V <sub>op</sub> |                | 1.9            | 2.0            | V          |
| 光谱宽度 (FWHM) Spectral width                      | Δλ              |                | 2              | 3              | nm         |
| 波长温度系数 Wavelength tuning vs. temperature        | Δλ/ΔT           |                | 0.3            |                | nm/°C      |
| 垂直远场发散角 (FWHM) Vertical F.F. divergence angle   | θ <sub>L</sub>  |                | 35             |                | Deg        |
| 水平远场发散角 (FWHM) Horizontal F.F. divergence angle | θ <sub>//</sub> |                | 6              |                | Deg        |

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

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

Power-Current-Voltage-Efficiency



Spectral characteristics

