

## GDL-8-0300-WTA-00-A


**Key Features:**

Mini Size  
 Mode Hopping Suppression  
 Low Cost  
 Auto Power Control Function  
 High Reliability

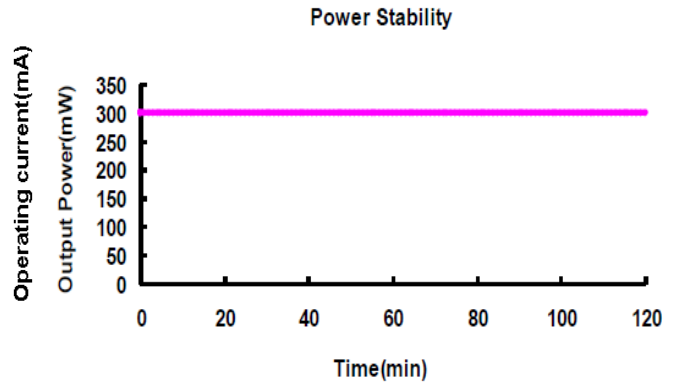
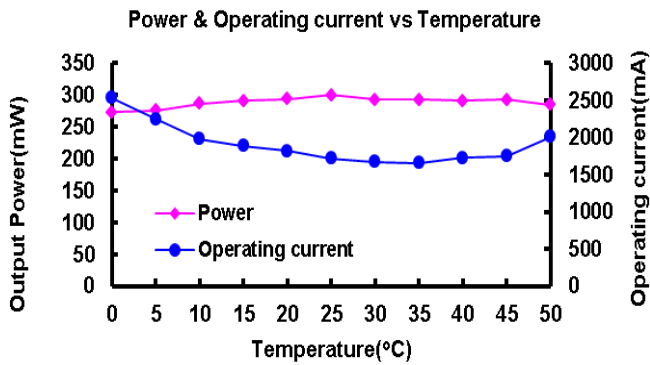
**Applications:**

Laser Display  
 Surveying Equipment  
 Laser Alignment & Pointing

| Model Number                                    |                           | GDL-8-0300-WTA-00-A                           |         |          |                                   |
|---|---------------------------|---|---------|----------|-----------------------------------|
| Optical Parameters                              |                           | Specs   |         |          | Conditions                        |
|   |                           | Min   | Typ     | Max      |                                   |
| Wavelength                                      |                           | 531nm   | 532nm   | 533nm    |                                   |
| Output Power                                    |                           | 250mW   | 300mW   | 350mW    | T <sub>case</sub> =25°C           |
| Power Stability                                 | 2hours @ Constant Temp    | -   | +/-2%   | +/-5%    | APC                               |
|   | Over Operating Temp Range | -   | +/-10%  | +/-25%   |                                   |
| Operating Temperature (Case)                    |                           | 5~+45 °C                                      | -       | -        | APC                               |
| Residual IR                                     |                           | -   | -       | 1%       |                                   |
| Beam Diameter (At Output Window)                |                           |   | 0.2mm   |          |                                   |
| Beam Divergence (Full Angle, 1/e <sup>2</sup> ) |                           | -   | 7mrad   | 12mrad   |                                   |
| Roundness                                       |                           | 70%   | 85%     | 100%     |                                   |
| M-Square  |                           | -   | 2.0     | 3.0      |                                   |
| Electrical Parameters                           |                           |   |         |          |                                   |
| LD Working Current                              |                           | -   | 1700mA  | 3000mA   | T <sub>case</sub> =25°C & P=300mW |
| LD Working Voltage                              |                           | -   | 2.2V    | 2.6V     |                                   |
| Monitor Current                                 |                           | 400uA   | 1200uA  | 2500uA   | T <sub>case</sub> =25°C & P=300mW |
| GDL Power Consumption                           |                           | -   | 3.7W    | 7.8W     |                                   |
| Mechanical Parameters                           |                           |   |         |          |                                   |
| Laser Head<br>Dimensions                        | Length                    | 24.5mm  | 24.7mm  | 24.9mm   |                                   |
|   | Diameter                  | 11.95mm                                       | 12.00mm | 12.05mm  |                                   |
| Beam Alignment<br>Tolerance                     | Off-axis Angle            |   | 10mrad  | 17.5mrad |                                   |
|   | Position(Δr)              |   | 0.2mm   | 0.3mm    |                                   |
| Laser Weight                                    |                           |   | 5.8g    |          |                                   |
| Reliability                                     |                           |   |         |          |                                   |
| Storage Humidity                                |                           | 5%~85% R.H. <sup>①</sup>                      |         |          |                                   |
| Storage Temperature                             |                           | -40 to +85 °C                                 |         |          |                                   |
| Shock   |                           | 1500g, 0.5ms, 6 shocks, 3 axes, 2 shocks/axis |         |          |                                   |
| Vibration                                       |                           | 20~2000Hz, 0.02g2/Hz, 3 axes, 1hr/axis        |         |          |                                   |
| Expected Lifetime (MTTF)                        |                           | 5000hrs                                       | -       | -        | @ Rated Power & Room Temp.        |

 Note: <sup>①</sup>Non-condensing

### Typical Output Performance



### Dimensions and Pin Configuration (Unit: mm)

