



LD850-100-1

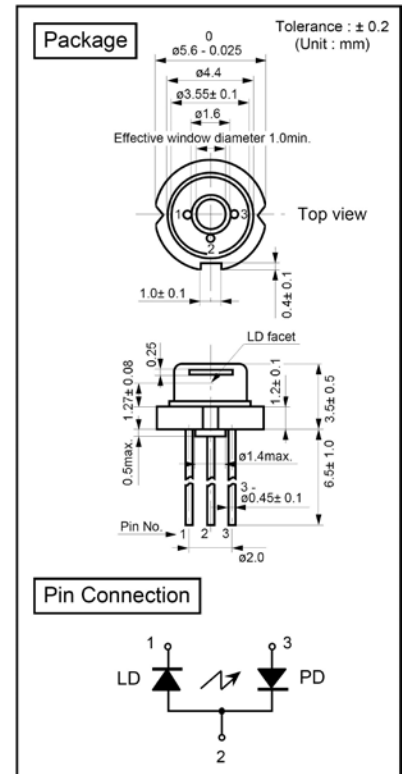
●Specifications:

Wavelength: 850nm
 Power: 100mW
 Package: TO18(Φ 5.6), with Pb free glass cap,PD

●External dimensions (Unit:mm):

●Absolute Maximum Ratings($T_c=25^\circ\text{C}$):

| Parameter | | Symbols | Ratings | Units |
|-----------------------|-------|-------------------|---------|------------------|
| Light Output | | P_o | 100 | mW |
| Reverse Voltage | Laser | V_r | 2 | V |
| | PD | $V_r(\text{PIN})$ | 30 | V |
| Operation Temperature | | T_{op} | -10~+50 | $^\circ\text{C}$ |
| Storage Temperature | | T_{stg} | -40~+85 | $^\circ\text{C}$ |



●Electrical and Optical Characteristics($T_c=25^\circ\text{C}$):

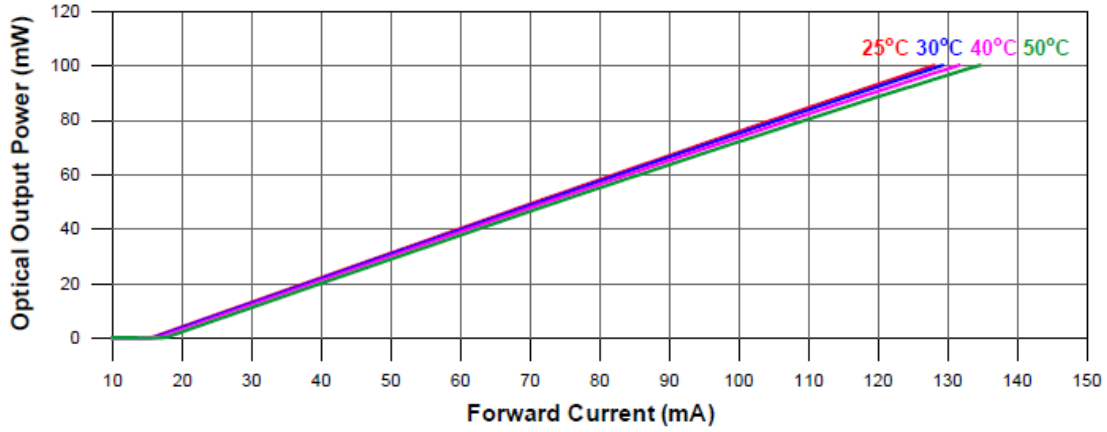
| Parameter | | Symbols | Condition | Min. | Typ. | Max. | Unit |
|----------------------------------|---------------|------------------|--|------|------|------|-------|
| Lasing Wavelength | | λ_p | $P_o=100\text{mW}$ | 840 | 850 | 860 | nm |
| Threshold Current | | I_{th} | - | - | 18 | 25 | mA |
| Operating Current | | I_{op} | $P_o=100\text{mW}$ | - | 127 | 150 | mA |
| Operating voltage | | V_{op} | - | - | 2.4 | 2.8 | V |
| Monitoring Output Current | | I_m | $P_o=100\text{mW}$ $V_r=0\text{V}$ | 0.1 | 0.25 | 1 | mA |
| Beam ¹⁾ Divergence | Parallel | $\theta_{//}$ | $P_o=5\text{mW}$ | - | 10 | 15 | deg. |
| | Perpendicular | θ_{\perp} | $P_o=5\text{mW}$ | - | 18 | 23 | deg. |
| Slope Efficiency | | η | 75mW-25mW ($I_{75\text{mW}}-I_{25\text{mW}}$) | - | 0.9 | - | mW/mA |

1) Full angle at half Maximum

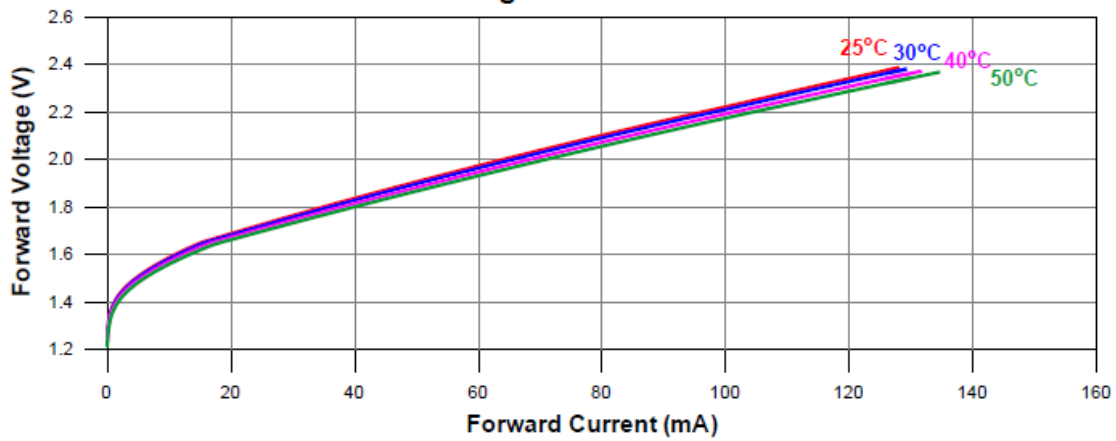
●Electrical and Optical Characteristics Curves($T_c=25^\circ\text{C}$):



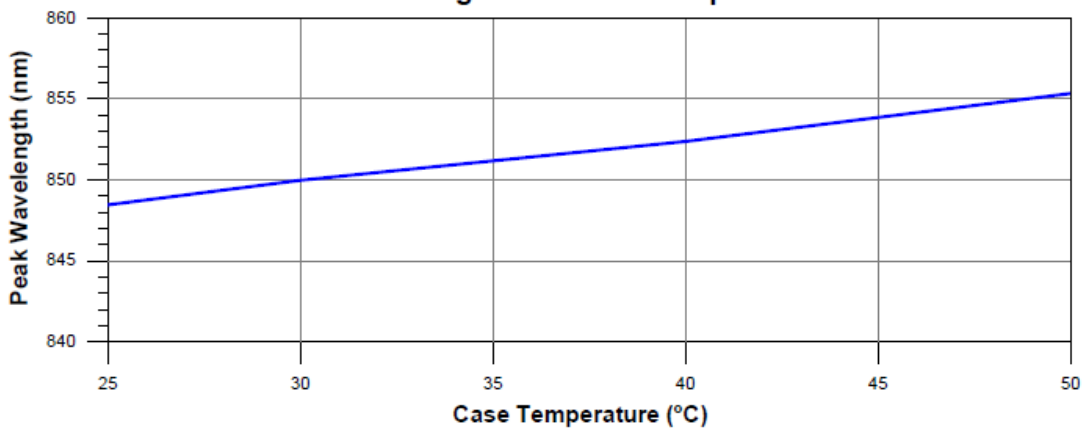
Optical Output Power v.s. Forward Current

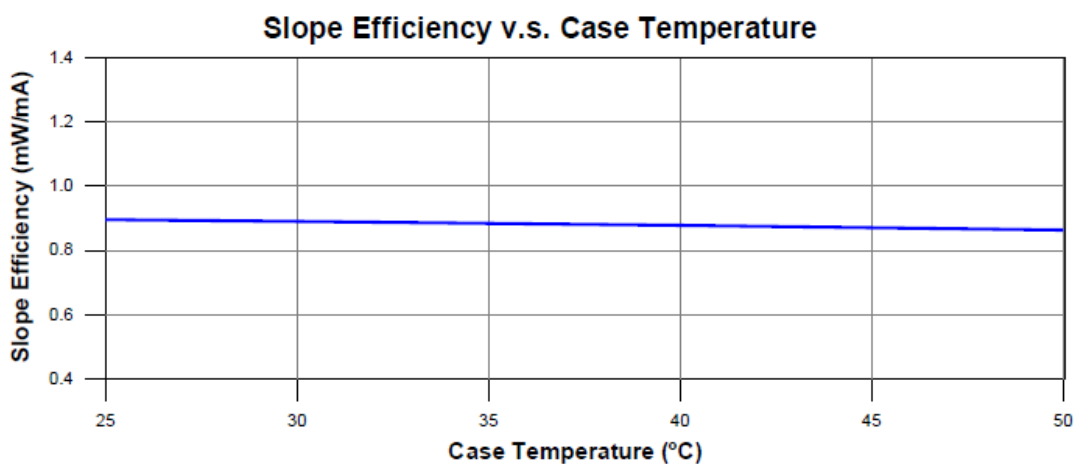
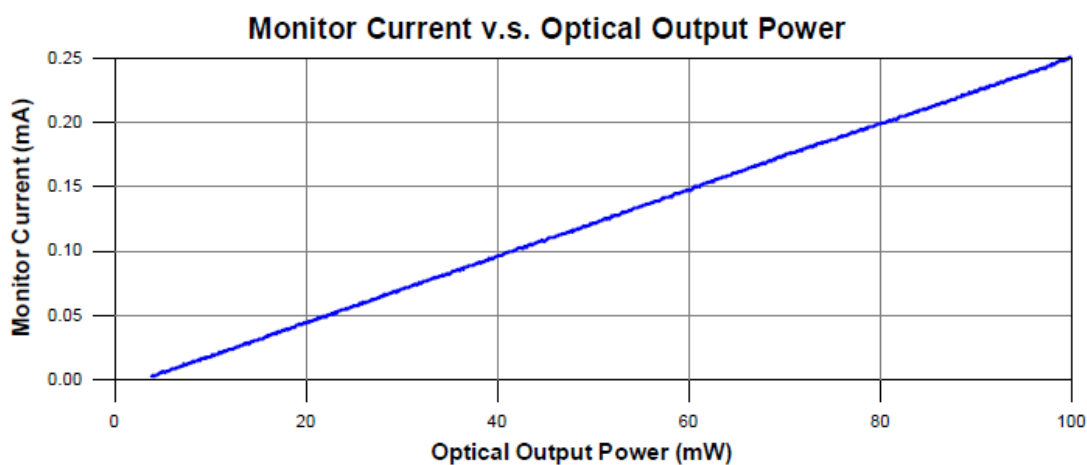
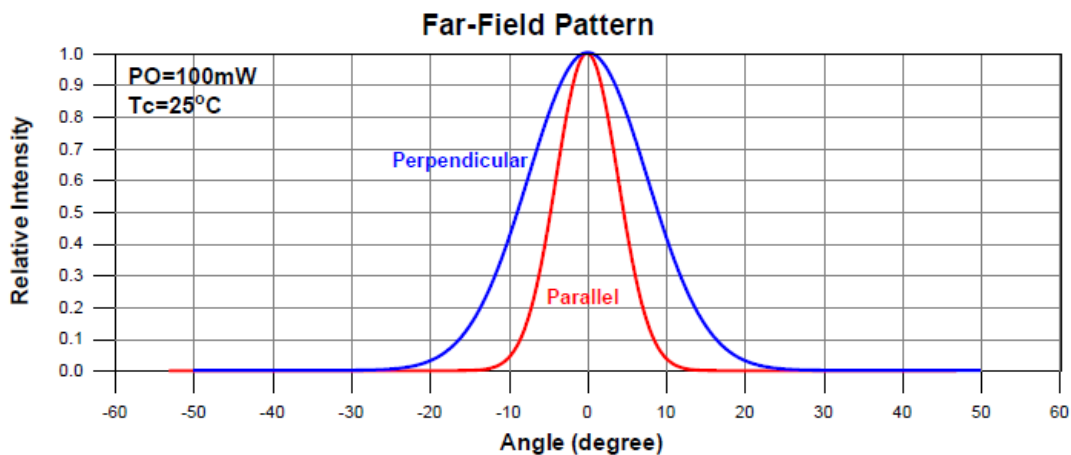
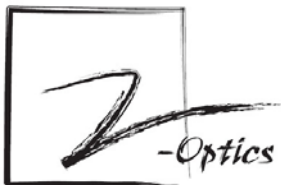


Forward Voltage v.s. Forward Current



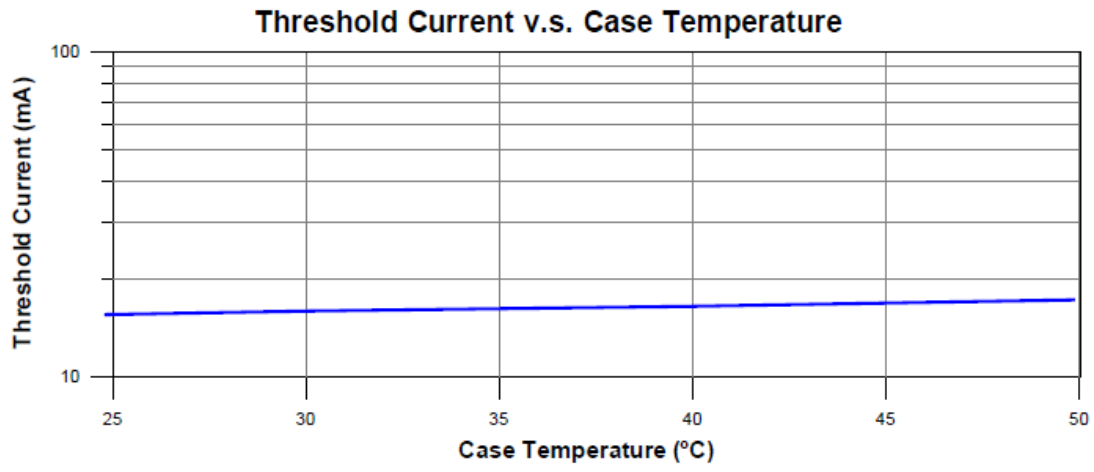
Peak Wavelength v.s. Case Temperature







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