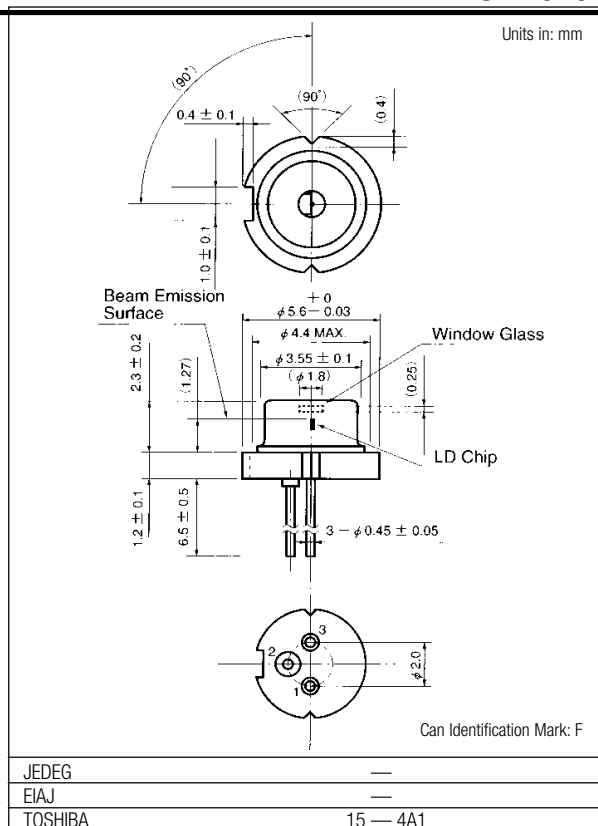
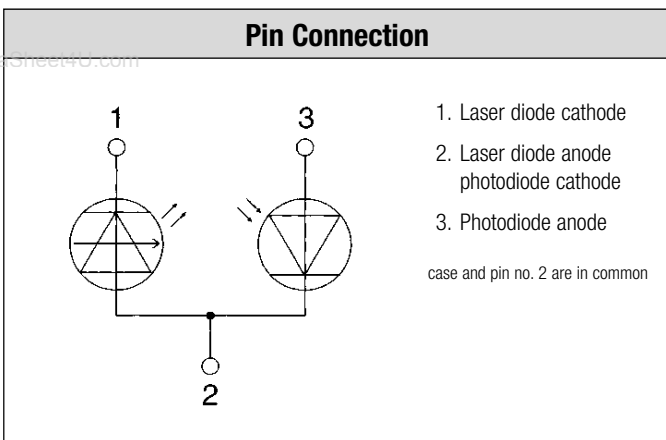


- Small package gain guided type MQW InGaAlP VLD
- Package flange: $\phi 5.6\text{mm}$
- Applications include:
Bar code scanners, measurement systems,
laser pointer, etc.



Maximum ratings ($T_c=25^\circ\text{C}$)

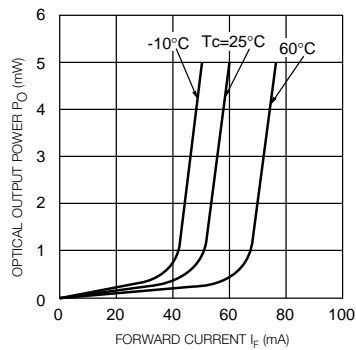
| Characteristic | Symbol | Rating | Unit |
|----------------------------|-------------|---------|------------------|
| Optical Output Power(CW) | P_O | 5 | mW |
| LD Reverse Voltage | $V_{R(LD)}$ | 2 | V |
| PD Reverse Voltage | $V_{R(PD)}$ | 30 | V |
| Operation Case Temperature | T_C | -10~+60 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40~+85 | $^\circ\text{C}$ |

Optical-electrical characteristics ($T_c=25^\circ\text{C}$)

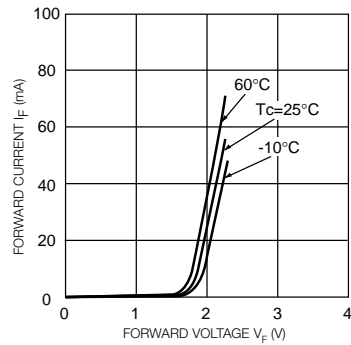
| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|----------------------|------------------|-----------------------------------|------|------|------|----------|
| Threshold Current | I_{th} | CW operation | — | 50 | 75 | mA |
| Operation Current | I_{op} | $P_o=5\text{mW}$ | — | 60 | 85 | mA |
| Operation Voltage | V_{op} | $P_o=5\text{mW}$ | — | 2.3 | 3.0 | V |
| Lasing Wavelength | λ_p | $P_o=5\text{mW}$ | 660 | 670 | 680 | nm |
| Beam Divergence | $\theta_{ }$ | $P_o=5\text{mW}$ | 7 | 10 | 16 | $^\circ$ |
| | θ_{\perp} | $P_o=5\text{mW}$ | 26 | 32 | 38 | $^\circ$ |
| Monitor Current | I_m | $P_o=5\text{mW}$ | 0.25 | 0.9 | 1.7 | mA |
| PD Dark Current | $I_{b(PD)}$ | $V_R=5\text{V}$ | — | — | 100 | nA |
| PD Total Capacitance | $C_{T(PD)}$ | $V_R=5\text{V}$, $f=1\text{MHz}$ | — | — | 20 | pF |

Examples of Typical Characteristics

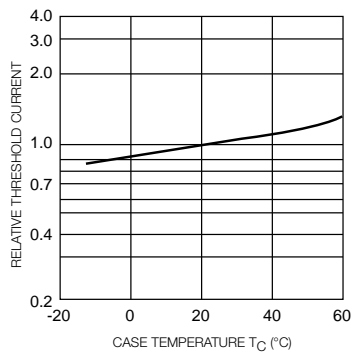
Optical Output Power vs. Forward Current



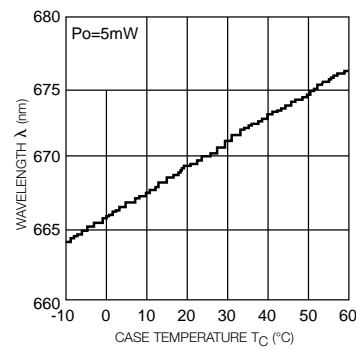
Forward Current vs. Forward Voltage



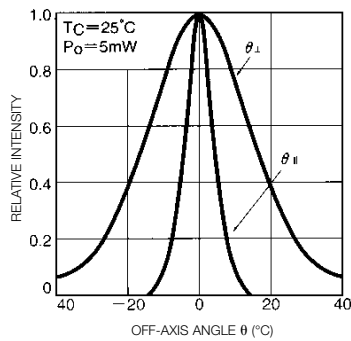
Case Temperature Dependence of Threshold Current



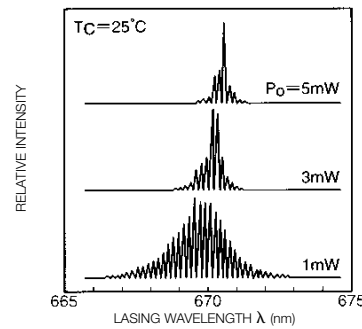
Case Temperature Dependence of Lasing Wavelength



Far-field Patterns



Lasing Spectrum



Monitor Current vs. Optical Output Power

