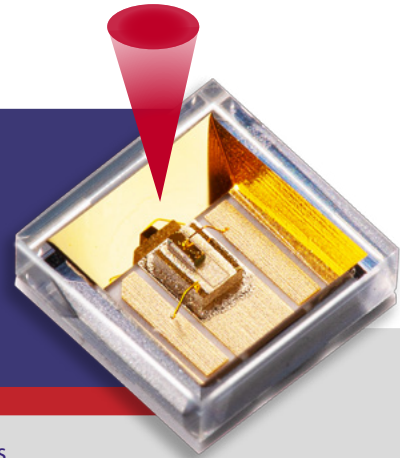


**Arima
LASERS**

638nm 100mW Laser Diode SMD Package

ADL-63Z01JY-F1

Temporary
Features

- ▶ Low operating current
- ▶ High efficiency
- ▶ Hermetic cap protection
- ▶ Variable package form

Applications

- ▶ Industrial processing
- ▶ Medical instrument
- ▶ Alignment and Distance Measurement
- ▶ Target Designators

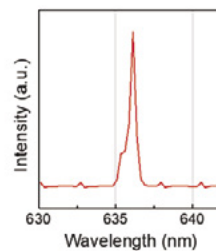
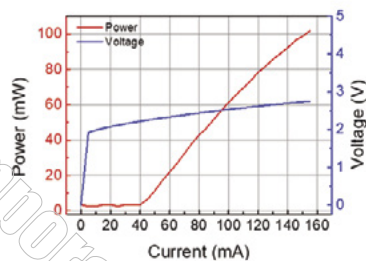
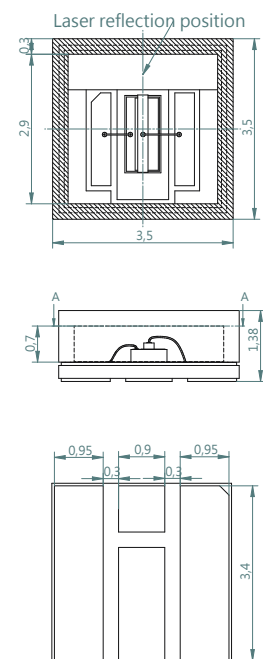
Absolute Maximum Ratings

| Parameter | Symbol | Condition | Rating | Unit |
|---------------------|-----------------|-----------|---------|------|
| Light Output Power | P _o | CW | 100 | mW |
| Reverse Voltage(LD) | V _{RL} | - | 2 | V |
| Case Temperature | T _C | - | -10~+40 | °C |
| Storage Temperature | T _S | - | -40~+85 | °C |

Electrical and optical characteristics (T_c = 25 °C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|--------------------------------|-----------------|------|------|------|-------|-------------------------|
| Peak Wavelength | λ | 634 | 638 | 642 | nm | P _o =100mW |
| Threshold Current | I _{th} | - | 37.5 | 42.5 | mA | - |
| Operating Current | I _{op} | - | 152 | 172 | mA | P _o =100mW |
| Operating Voltage | V _{op} | - | 2.7 | 3.1 | V | P _o =100mW |
| Differential Efficiency | η | 0.85 | 1.0 | - | mW/mA | P _o =5~100mW |
| Parallel Divergence Angle | θ _∥ | 4 | 8 | 12 | deg. | P _o =100mW |
| Perpendicular Divergence Angle | θ _⊥ | 15 | 20 | 25 | deg. | P _o =100mW |

- * Sufficient heat dissipation is required for cw operation.
- * The characteristics was tested under cw condition.
- * Divergence angle measurement was based on FWHM

Cross-section A-A

Temporary