

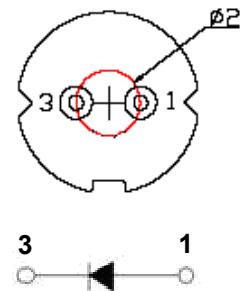
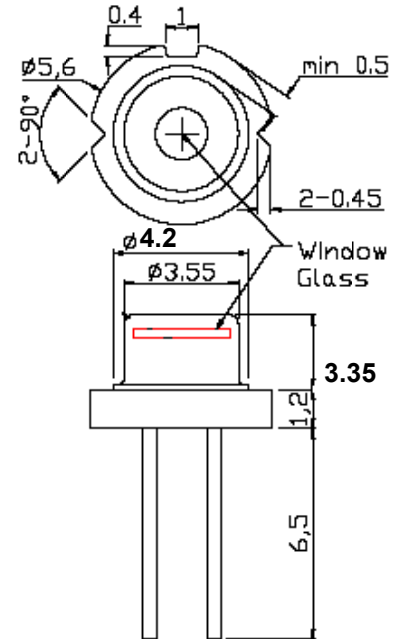
## ★635nm 0.5W 25 °C TO56 PKG

### ★ Features

- High power
- High brightness

### ★ Applications

- Laser display
- PDT
- Biochemistry
- Military
- Medical/Life and health sciences
- Illumination



※ Dimensions are in mm.

### ★ Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	$P_O$	CW	500	mW
Reverse voltage (LD)	$V_{RL}$	-	2	V
Case temperature	$T_C$	-	-10~+30	°C
Storage temperature	$T_S$	-	-40~+85	°C

### ★ Electrical and optical characteristics ( $T_c=25\text{ °C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	$\lambda$	632	638	644	nm	$P_o=500\text{mW}$
Polarization			TM			
Threshold current	$I_{th}$	-	200	300	mA	
Operating current	$I_{op}$	-	700	900	mA	$P_o=500\text{mW}$
Operating voltage	$V_{op}$	1.9	2.5	3.0	V	$P_o=500\text{mW}$
Differential efficiency	$\eta$	-	1.0	-	mW/mA	
Perpendicular divergence angle	$\theta_{\perp}$	25	36	45	deg	
Perpendicular divergence angle	$\theta_{\parallel}$	-	6	-	deg	

### ● Precautions

- \* Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- \* Take precautions to avoid electrostatic discharge and/or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- \* Proper heat sinking of the device assures stability and lifetime. Always ensure that maximum operating temperatures are not exceeded.
- \* Observing visible or invisible laser beams with the human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- \* No laser device should be used in any application or situation where life or property is at risk in event of device failure.
- \* Specifications are subject to change without notice. Ensure that you have the latest specification by contacting us prior to purchase or use of the product.