

## 450nm, 100mw, TO38 package

### Application :

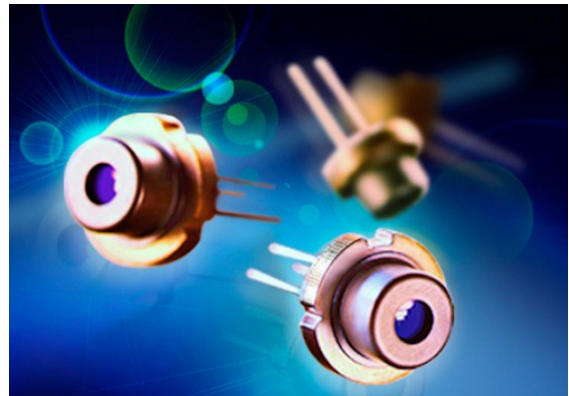
Industrial use / Biomedical / Projection

### Property :

Wavelength Range = 450nm

### Introduction :

Typical emission wavelength at 450nm and it is a efficient radiation source for cw and pulsed operation.



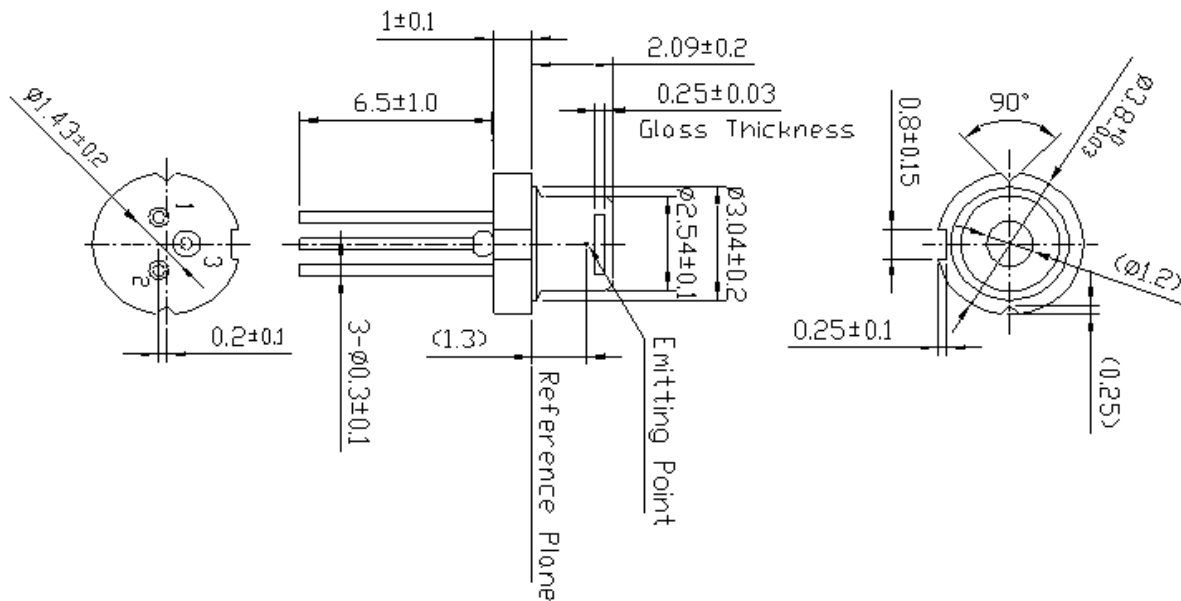
### Laser Characteristics (T=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Emission Wavelength	$\lambda_p$	440	450	460	nm	Po=100mW
Optical Output power	Po	-	-	100	mW	-
Threshold Current	Ith	-	-	50	mA	-
Operating Current	Iop	-	-	140	mA	Po=100mW
Operating Voltage	Vop	-	-	6	V	Po=100mW
Beam Divergence	$\theta_{//}$	6.5	8.5	10.5	deg	Po=100mW
	$\theta_{\perp}$	20	23	25	deg	Po=100mW
Beam Deviation Angle	$\Delta\theta_{//}$	-2.5	-	2.5	deg	Po=100mW
	$\Delta\theta_{\perp}$	-3	-	3	deg	Po=100mW

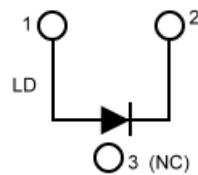
### Maximum Rating

Parameter	Symbol	Value	Unit
Operating Temperature	To	-10~+80	°C
Storage Temperature	Ts	-40~+85	°C

## Package Outlines :

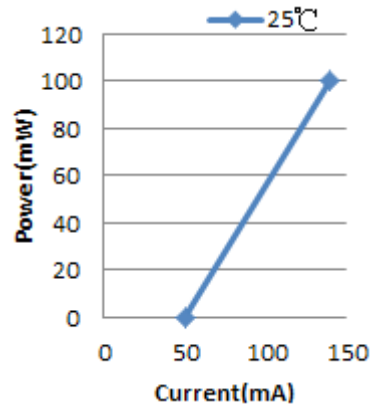


## Package Connection :



Y Type

## Optical Output Power vs Forward Current :



## Caution :

- The forward voltage to drive the optical output power of an LD fluctuates with temperature. High temperature compromises optical efficiency of an LD and thus results in even more operating current to support constant output optical power.
- The reliability of LDs is influenced by Static electricity or electrical surges. Wrist strap or anti-electrostatic glove are recommended to use when picking up LDs.

## Certification :

