

★ 650nm 5mW 50°C Reliable Operation

● Features

- 1. High temperature operation
- 2. Single mode laser
- 3. Low cost type

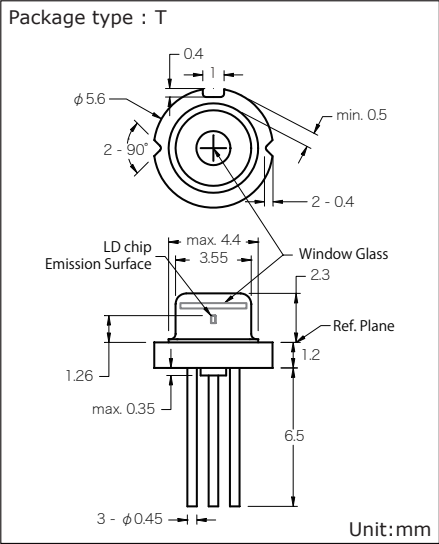


Fig.1:Outside view

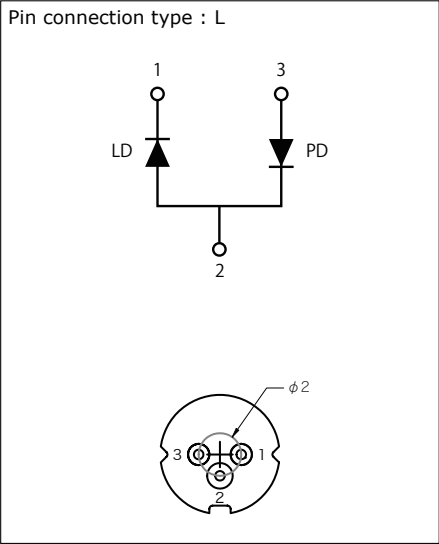


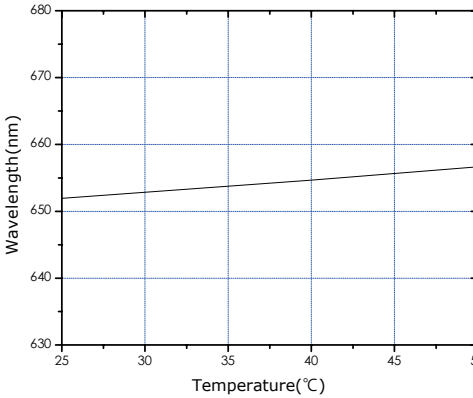
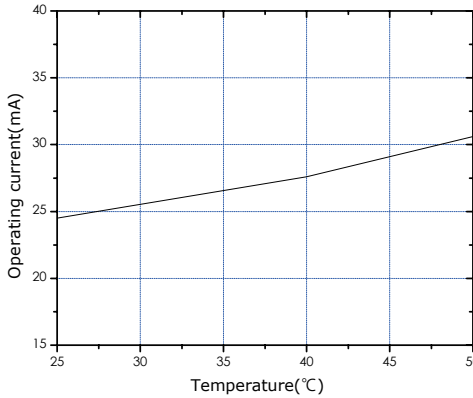
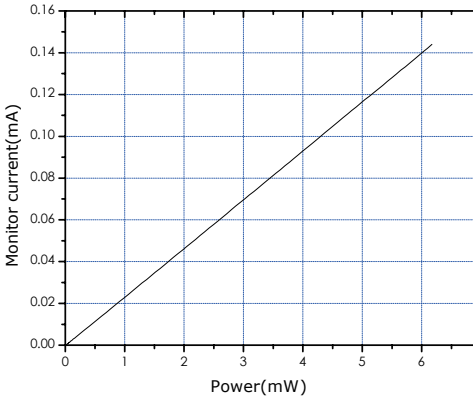
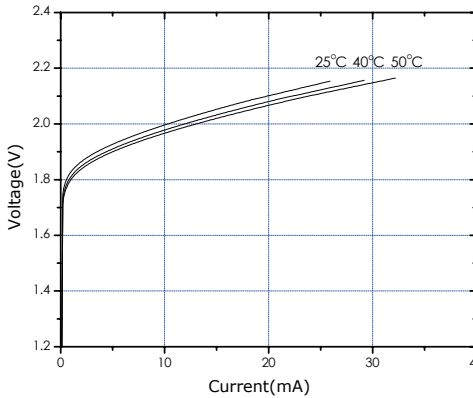
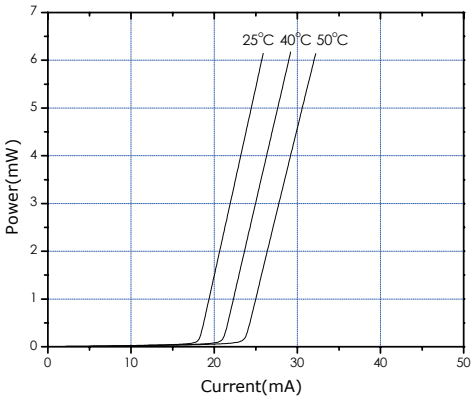
Fig.2:Pin connection

● Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P _o	CW	7	mW
Reverse voltage (LD)	V _{RL}	-	2	V
Reverse voltage (PD)	V _{RD}	-	30	V
Forward current (PD)	I _{FD}	-	10	mA
Case temperature	T _c	-	-10~+50	°C
Storage temperature	T _s	-	-40~+85	°C

● Electrical and optical characteristics (T_c=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	λ	645	655	660	nm	P _o =5mW
Threshold current	I _{th}	-	18	25	mA	
Operating current	I _{op}	-	25	35	mA	P _o =5mW
Operating voltage	V _{op}	-	2.2	2.5	V	P _o =5mW
Differential efficiency	η	0.4	0.7	1.1	mW/mA	P _o =3-5mW
Monitor current	I _m	0.05	0.2	0.4	mA	P _o =5mW , V _{RD} =5V
Parallel divergence angle	θ _∥	6	9	11	deg	P _o =5mW
Perpendicular divergence angle	θ _⊥	24	28	38	deg	
Parallel FFP deviation angle	Δθ _∥	-3	0	+3	deg	
Perpendicular FFP deviation angle	Δθ _⊥	-3	0	+3	deg	
Emission point accuracy	ΔxΔyΔz	-80	0	+80	μm	



● 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.