

650nm 7mW 85 °C High Temperature, Reliable Operation!

Features

- High temperature operation
- High reliability
- Stable quality
- BRDS & REACH Compliance

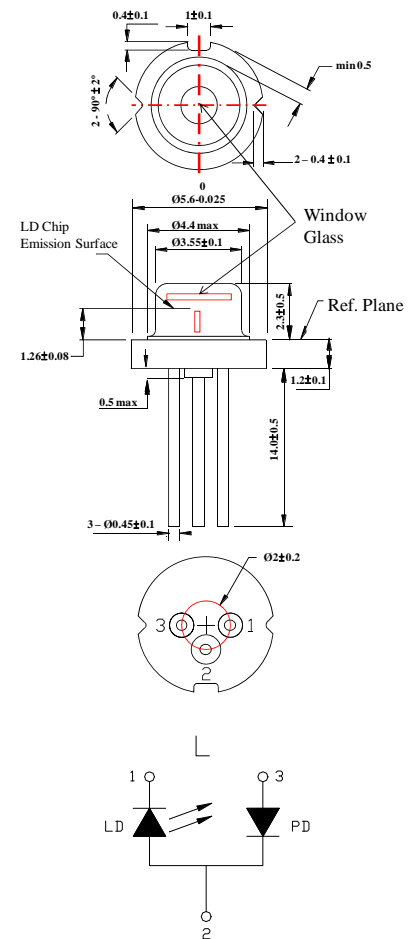


Applications

- Automotive particle sensor
- Industrial and commercial light source

Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P _O	CW	10	mW
Reverse voltage (LD)	V _{RL}	-	2	V
Reverse voltage (PD)	V _{RD}	-	15	V
Case temperature	T _C	-	-40~+85	°C
Storage temperature	T _S	-	-40~+95	°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 =7mW
Threshold current	I _{th}	-	20	28	mA	
Operating current	I _{op}	-	28	35	mA	P _O =7mW
Operating voltage	V _{op}	-	2.2	2.5	V	P _O =7mW
Differential efficiency	η	0.7	0.85	1.10	mW/mA	P _O =3-5mW
Monitor current	I _m	0.1	0.2	0.3	mA	P _O =7mW, V _{RD} =5V
Parallel divergence angle	θ _{//}	6	9	12	deg	P _O =7mW
Perpendicular divergence angle	θ _⊥	25	28	32	deg	
Parallel FFP deviation angle	Δθ _{//}	-2	0	+2	deg	
Perpendicular FFP deviation angle	Δθ _⊥	-2	0	+2	deg	
Emission point accuracy	ΔxΔyΔz	-80	0	+80	um	

• Precautions

- * Do not operate the device above maximum ratings even short period of time. 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.

ARIMA LASERS CORP.

PHONE: 886-3-4699800 | FAX: 886-3-4699600

E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

For reference only. Contents above are subject to change without notice.



650nm 7mW 85 °C High Temperature, Reliable Operation!

* 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.

