

AlGaInP Visible Laser Diode

ADL-6305ETL

6-2D-LD63-077_Rev.01

★635nm 5mW **Low Iop 26mA**

•Features

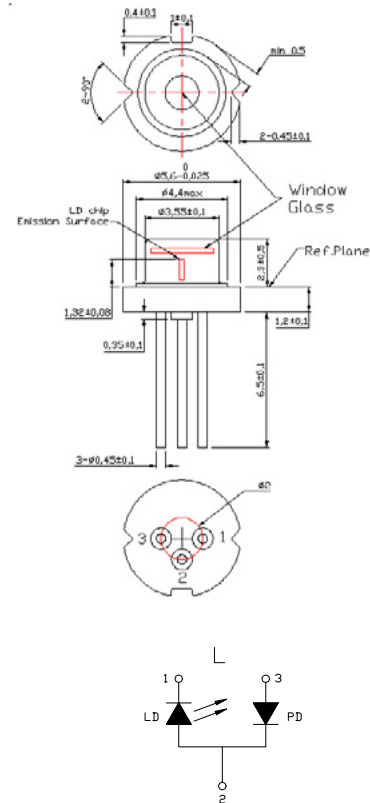
1. Low Iop
2. High precision assembly
3. High visibility

•Applications

1. General purpose red laser light source
2. Industrial laser markers / measuring instruments
3. Laser pointers / levelers

•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~+40	°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	630	639	645	nm	P _O =5mW
Threshold current	I _{th}	-	19	23	mA	
Operating current	I _{op}	-	26	30	mA	P _O =5mW
Operating voltage	V _{op}	-	2.15	2.3	V	P _O =5mW
Differential efficiency	η	0.4	0.7	1.0	mW/mA	P _O =3-5mW
Monitor current*	I _m	0.1	0.17	0.3	mA	P _O =5mW, V _{RD} =5V
Parallel divergence angle	$\theta_{\parallel}$	4	7.0	10	deg	P _O =5mW
Perpendicular divergence angle	$\theta_{\perp}$	23	29	35	deg	
Parallel FFP deviation angle	$\Delta\theta_{\parallel}$	-3	0	+3	deg	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-3	0	+3	deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-80	0	+80	um	

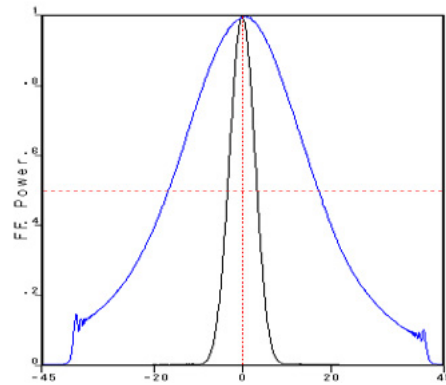
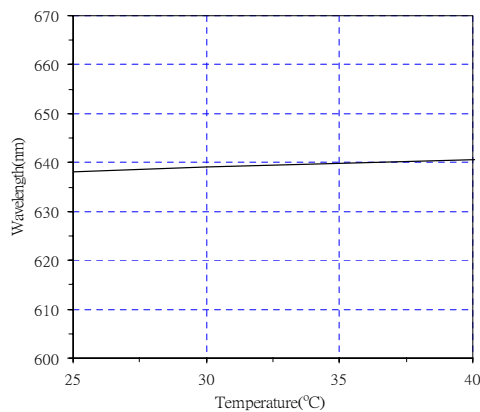
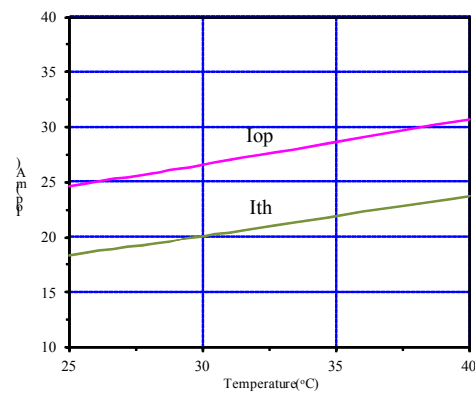
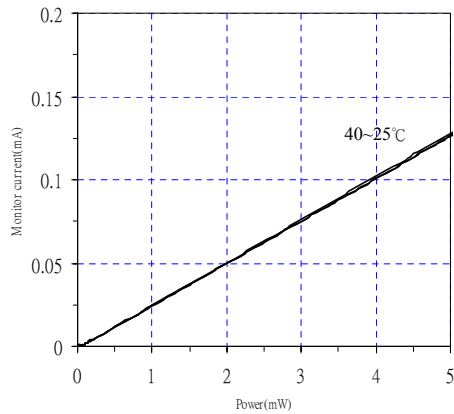
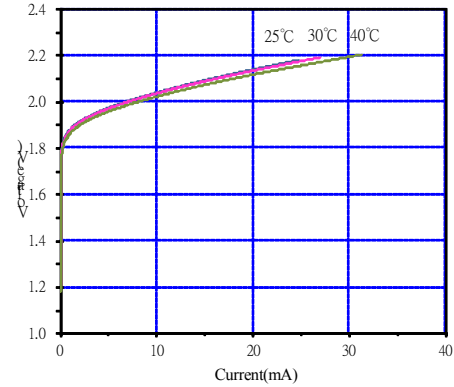
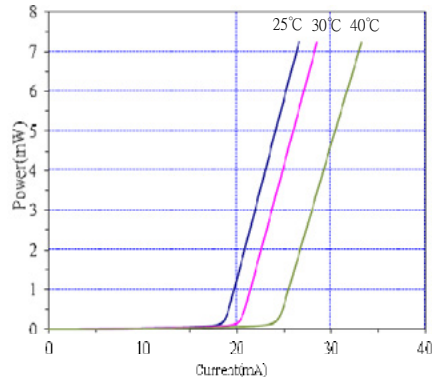
*Monitor current ranking is available.

•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.

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