

Model No. LD808A200C15 (LD-808-200A)
808nm 200mW 50°C Laser Diode in TO-18 Ø5.6mm Package

FEATURES

- 808nm 200mW High Power Laser Diode
- Low operation current
- Built-in monitoring PD
- Estimated MTTF >9,000 hrs
- Cost effective
- Package: TO-18 (dia. 5.6mm)

APPLICATIONS

- Pumps for solid state lasers
- Miniature low power green laser
- Medical use

ABSOLUTE MAXIMUM RATINGS

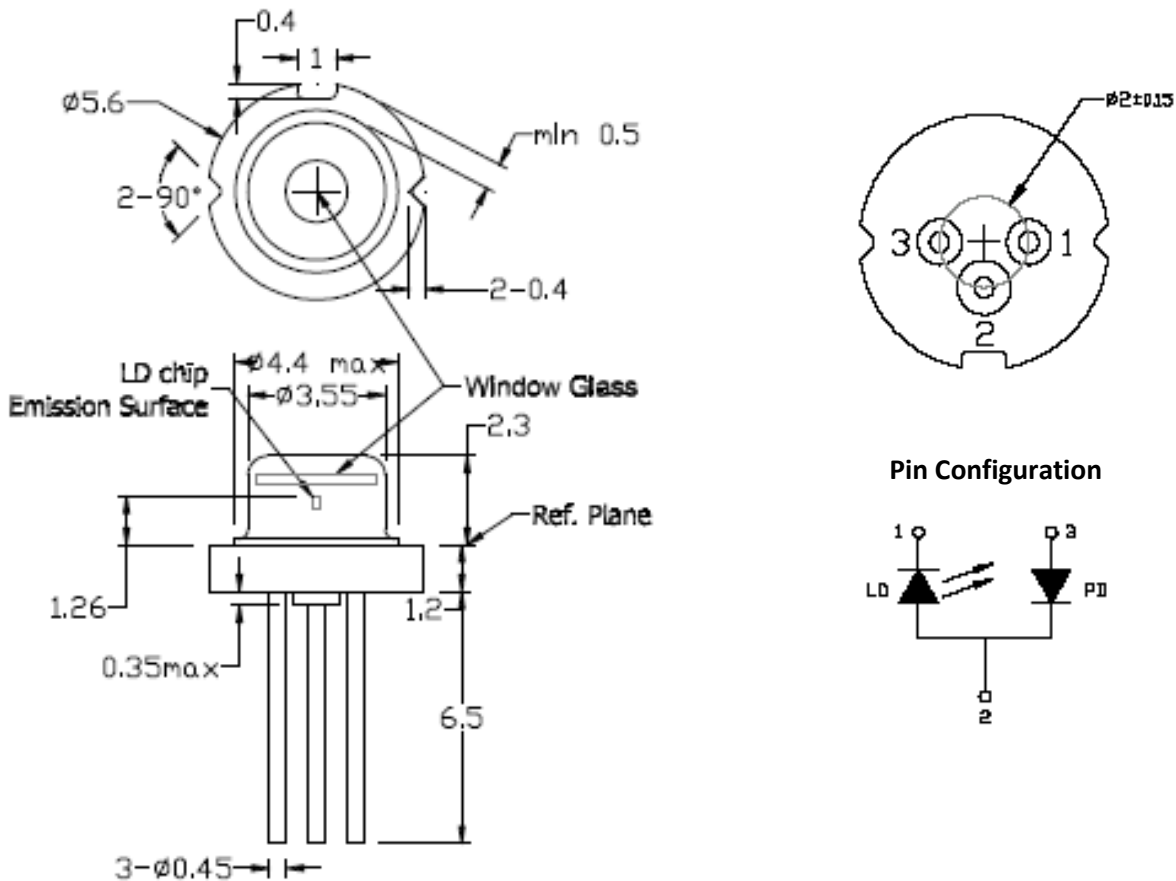
PARAMETER	SYMBOL	CONDITION	RATING	UNIT
LIGHT OUTPUT POWER	P_O	CW	200	mW
REVERSE VOLTAGE (LD)	V_{RL}	-	2	V
CASE TEMPERATURE	T_C	-	-10 to +50	°C
STORAGE TEMPERATURE	T_S	-	-40 to +85	°C

ELECTRICAL AND OPTICAL CHARACTERISTICS ($T_C = 25 \pm 2$ °C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
PEAK WAVELENGTH	λ	805	808	811	nm	$P_O = 200\text{mW}$
THRESHOLD CURRENT	I_{th}	-	55	70	mA	
OPERATING CURRENT	I_{op}	-	260	280	mA	
OPERATING VOLTAGE	V_{op}	-	1.7	1.9	V	
DIFFERENTIAL EFFICIENCY	η	0.8	1.0	-	mW/mA	$P_O = 150\text{-}200\text{mW}$
MONITOR CURRENT	I_m	1.0	1.8	2.5	mA	$P_O = 200\text{mW}$
PARALLEL DIVERGENCE ANGLE	$\Theta_{//}$	-	9	15	deg	
PERPENDICULAR DIVERGENCE ANGLE	$\Theta_{\perp}$	-	41	48	deg	
PARALLEL FFP DEVIATION ANGLE	$\Delta \Theta_{//}$	-3	0	+3	deg	
PERPENDICULAR FFP DEVIATION ANGLE	$\Delta \Theta_{\perp}$	-5	0	+5	deg	
EMISSION POINT ACCURACY	$\Delta x \Delta y \Delta z$	-80	0	+80	um	

Note: The above specifications are subject to change without notice.

MECHANICAL OUTLINE (unit: mm)



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 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 the 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.

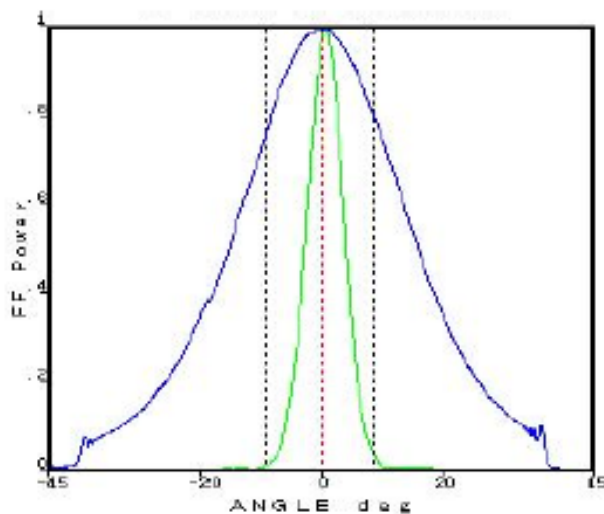
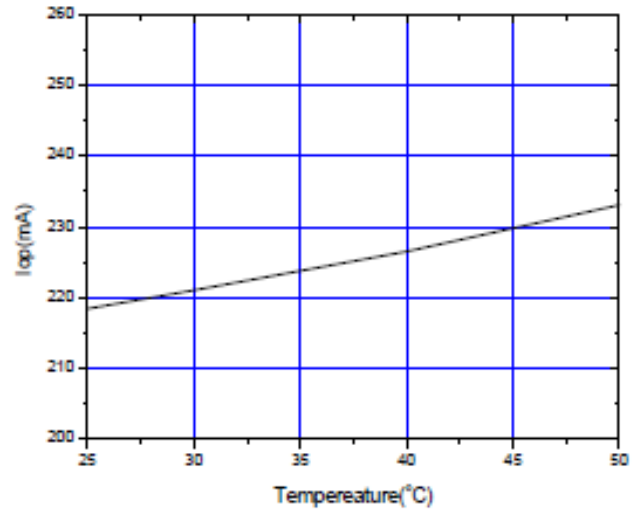
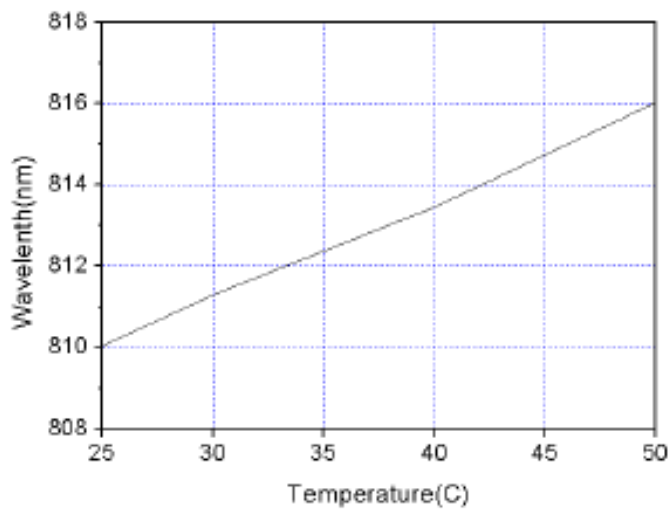
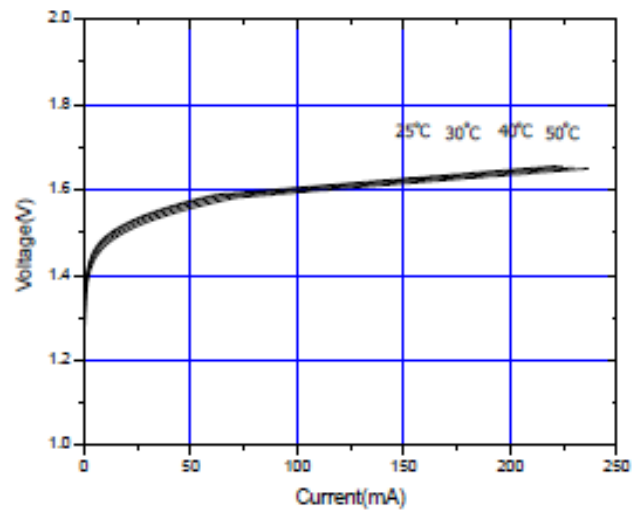
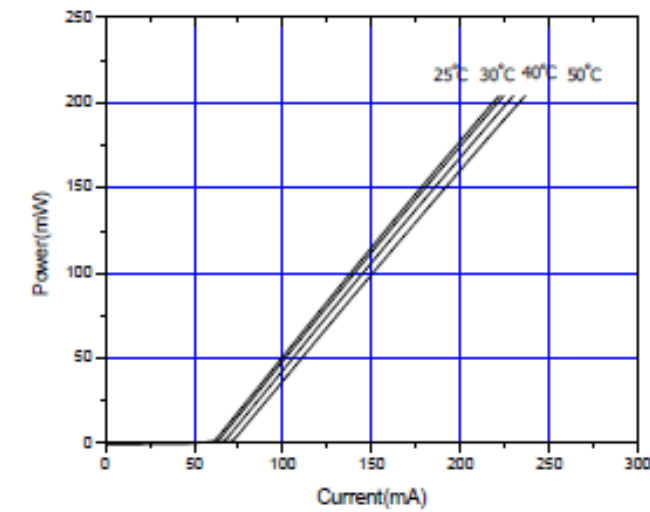
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TYPICAL CHARACTERISTICS



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