

830nm 5000mW 50°C Pulsed Laser Diode in TO-56 φ5.6mm Package

Part No. LDP830A5WC15

FEATURES

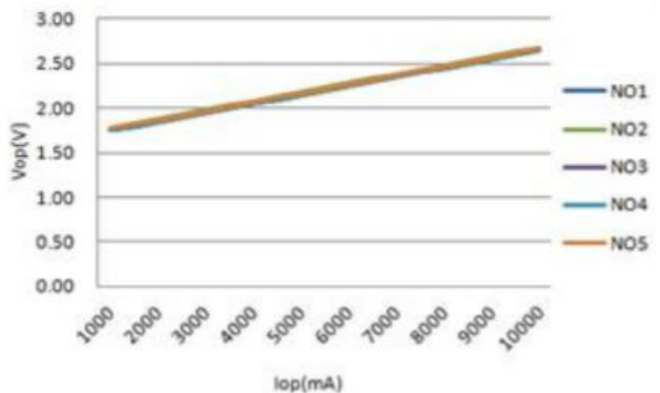
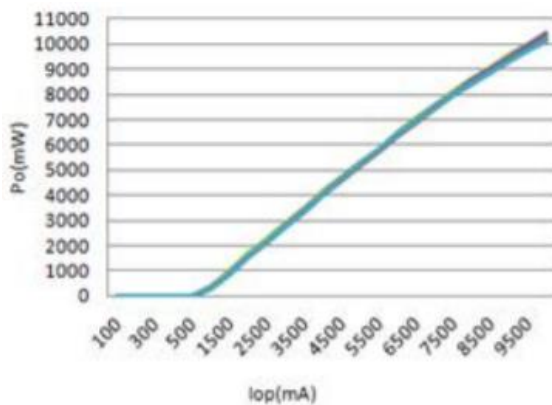
- 830nm 5W (ms pulse) Fabry-Perot cavity semiconductor laser
- High power
- Package: TO56 (dia. 5.6mm)

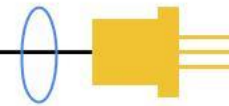
SPECIFICATIONS (T_C = 20 °C)

Item	Parameter	Min.	Typ.	Max.	Unit
Optical Parameter	Lasing wavelength	820	830	840	nm
	Output power	-	5 (ms pulse)	-	W
	Spectral width	-	1.8	3.0	nm
	Emitting area width	-	150	-	um
	Temperature coefficient	-	0.3	-	nm/°C
	Fast axis divergence	-	30	40	deg (cw-5w)
	Slow axis divergence	-	5	10	deg (cw-5w)
	Pulse width	0	10	-	ms
	Pulse frequency	0	10	-	Hz
Electrical Parameter	Slope efficiency	1.05	1.10	-	W/A
	Threshold current	-	0.5	1.0	A
	Operating current	-	4.9	5.3	A
	Operating voltage	-	2.5	3.0	V
Others	Package	TO56			-
	Operating temperature	10 to 50			°C
	Storage temperature	-10 to +60			°C

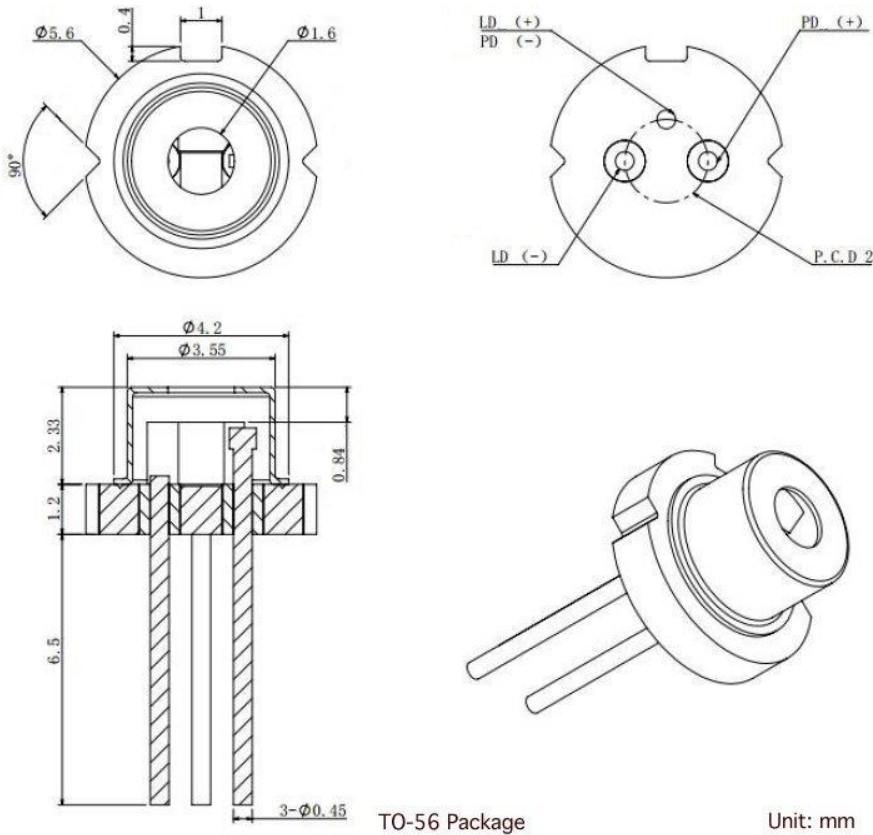
TYPICAL CHARACTERISTICS

P-I-V Curve





MECHANICAL OUTLINE (unit: mm)



ADDITIONAL NOTES

- Data in this sheet are based on TO56 (socket, capless) package testing under 10ms 10Hz pulse condition.
- 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.