

Model No. LDP830A5WC15
830nm 5W Pulsed High Power FP Diode Laser in TO56 ϕ 5.6mm Package

FEATURES

- 830nm 5W (ms pulse) Fabry-Perot cavity semiconductor laser
- Provides beam shaping services, such as fast-axis compression according to customer demands
- Package: TO56 (dia. 5.6mm)



SPECIFICATIONS ($T_c = 20^\circ\text{C}$)

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	-	μm
	Temperature coefficient	-	0.3	-	nm/ $^\circ\text{C}$
	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	TO ϕ 56			-
	Operating temperature	10 to 50			$^\circ\text{C}$
	Storage temperature	-10 to +60			$^\circ\text{C}$

Notes:

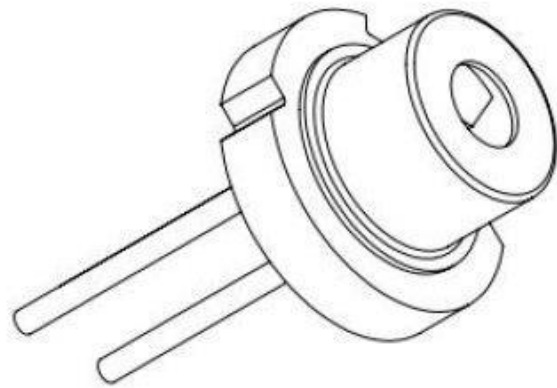
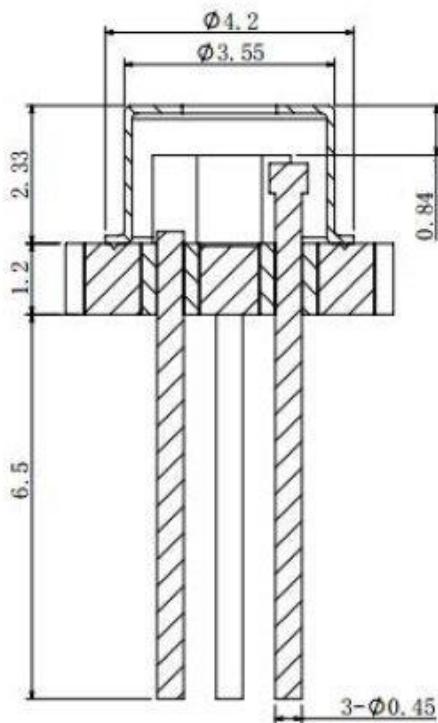
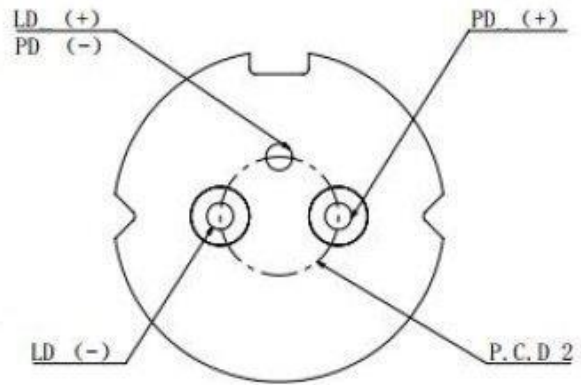
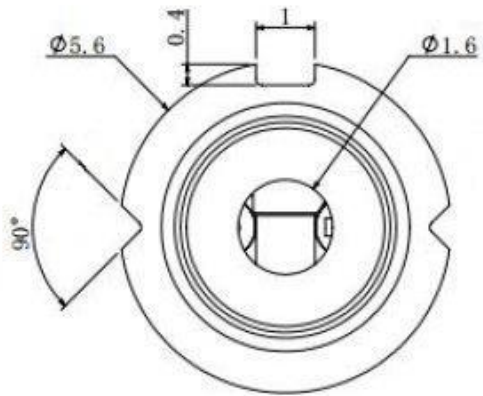
1. The above specifications are subject to change without notice.
2. Data in this sheet are based on TO56 (socket, capless) package testing under 10ms 10Hz pulse condition.



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MECHANICAL OUTLINE (unit: mm)



TO-56 Package

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.



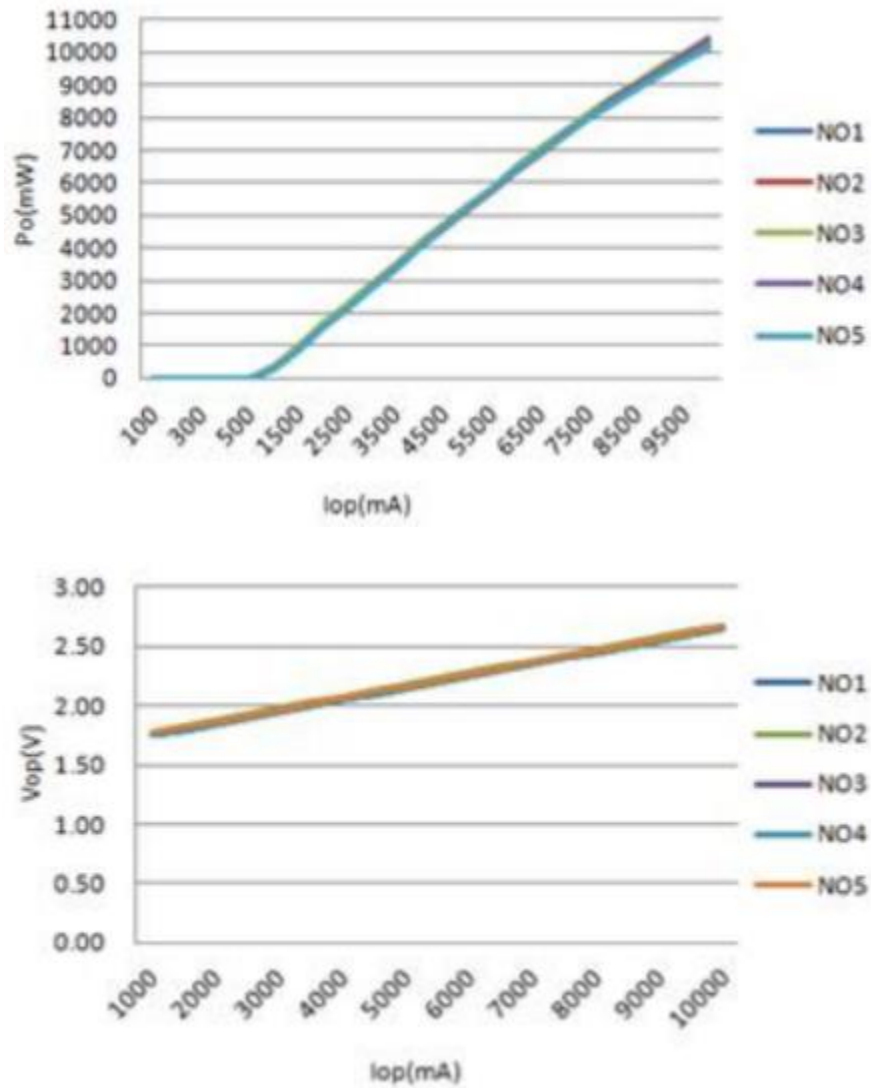
19608 Camino De Rosa, Walnut, CA 91789, USA | Tel: (909)718-0999 | Fax: (909)718-0998 |

E-mail: info@lasermate.com | URL: <http://www.lasermate.com>



TYPICAL CHARACTERISTICS

P-I-V Curve



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