



Model No. LDOE-830-150-A6

830nm 150mW Infrared Laser Diode with >30,000 Random Dots Pattern

The φ6.5mm 830nm 150mW laser diode with random dots pattern features power set by the user, high quality random pattern diffractive optical elements (DOE), and random dot >30,000.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	Symbol	Rating	Unit
LASER MODULE OPTICAL OUTPUT POWER	Po	160	mW
REVERSE VOLTAGE (LD)	VRL	0	V
REVERSE VOLTAGE (PD)	VRD	30	V
FORWARD CURRENT (PD)	IFD	10	mA
OPERATION CASE TEMPERATURE	Tc	-10 ~ +50	°C
STORAGE TEMPERATURE	Ts	-40 ~ +85	°C

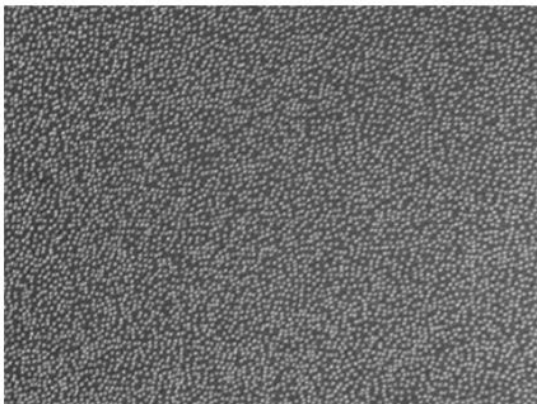


ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc = 25 °C)

PARAMETER	Symbol	Min.	Typ.	Max.	Unit	Conditions
WAVELENGTH	λ	-	830	-	nm	Po = 150mW
THRESHOLD CURRENT	Ith	-	65	80	mA	
OPERATION CURRENT	Iop		260	350	mA	Po = 150mW
OPERATION VOLTAGE	Vop		2	2.4	Volt	Po = 150mW
MONITOR CURRENT	Im	0.4	1.7	2.15	mA	Po = 150mW; VRD = 5V
RANDOM DOT				>30,000		
FIELD OF VIEW (FOV)				80		
IMAGE RATIO (DIAGONAL)				4:3		

- Sufficient heat dissipation is required for CW operation.

DOE PATTERN

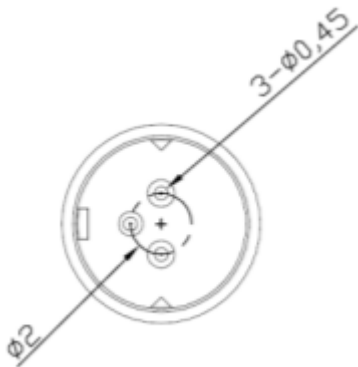
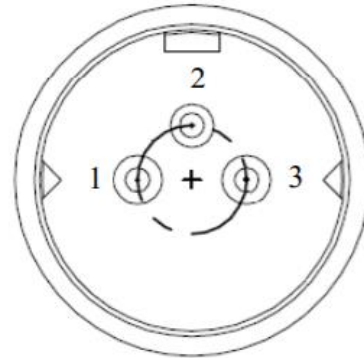
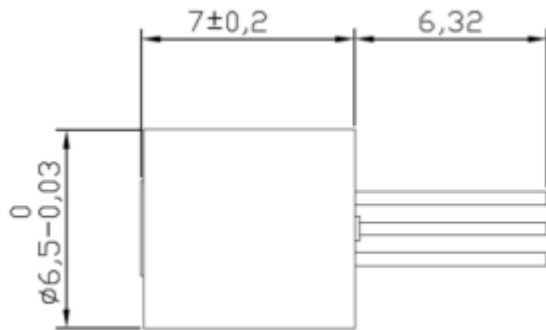


Note: The above specifications are subject to change without notice.

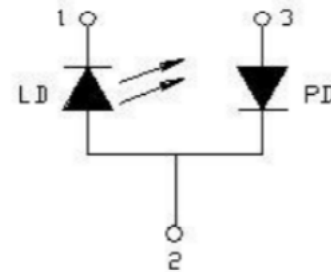




MECHANICAL OUTLINE (units: mm)



Pin Configuration



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 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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