

## Laser Diode



### L850P030



### Description

Thorlabs Ø5.6 mm, TO-18 can package discreet laser diode is a compact light source suited to many applications. Our lasers are fully compatible with our entire line of Laser Diode and TEC Controllers as well as our selection of Laser Diode Mounts and Collimation Solutions.

### Specifications

( $P_o = 30 \text{ mW}$ ,  $T_c = 25 \text{ }^\circ\text{C}$ )

Specification	Symbol	Max
Optical Output Power, mW	$P_o$	30
LD Reverse Voltage, V	$V_{R(LD)}$	2
PD Reverse Voltage, V	$V_{R(PD)}$	30
Operation Case Temperature, $^\circ\text{C}$	$T_{op}$	-10 to 60
Storage Temperature, $^\circ\text{C}$	$T_{STG}$	-40 to 85

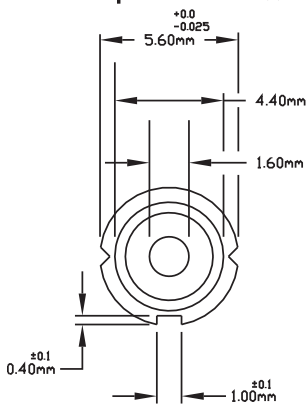
Specification	Symbol	Min	Typ	Max
Lasing Wavelength, nm	$\lambda_p$	840	850	860
Threshold Current, mA	$I_{th}$		20	35
Operation Current, mA	$I_{op}$		65	95

Specification	Symbol	Min	Typ	Max
Operating Voltage, V	$V_{op}$		2.0	2.5
Monitor Current, mA	$I_m$		0.2	0.50
Slope Efficiency, mW/mA	$\eta$	0.4	0.7	1.0
Beam Divergence, $^\circ$	$\theta_{//}$	7.0	8.5	12
Beam Divergence, $^\circ$	$\theta_{\perp}$	23	30	35
Astigmatism, $\mu\text{m}$	$A_s$			15
Beam Angle Deviation, $^\circ$	$\theta_{//}$			
Beam Angle Deviation, $^\circ$	$\theta_{\perp}$			
Emission Point Accuracy, $\mu\text{m}$	$\Delta X, \Delta Y, \Delta Z$	-60		60

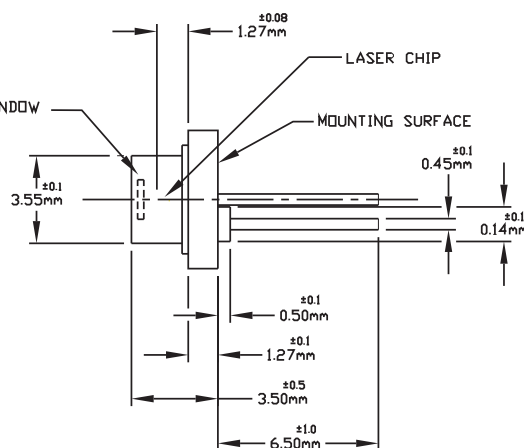
### Drawings



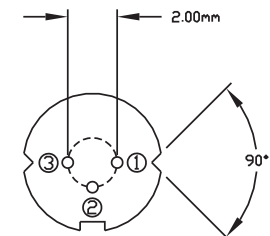
Top View



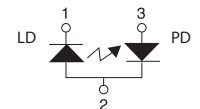
Side View



Bottom View



Pin Code 5A



Pin Description

- 1 Laser Cathode
- 2 Case Common
- 3 Monitor Diode Anode

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