

Laser Diode



L850P010



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

($P_o = 10 \text{ mW}$, $T_c = 25 \text{ }^\circ\text{C}$)

Specification	Symbol	Max
Optical Output Power, mW	P_o	10
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 50
Storage Temperature, $^\circ\text{C}$	T_{STG}	-40 to 85

Specification	Symbol	Min	Typ	Max
Lasing Wavelength, nm	λ_p	835	850	865
Threshold Current, mA	I_{th}	10	25	40
Operation Current, mA	I_{op}	25	50	70
Operating Voltage, V	V_{op}	1.8	2.0	2.5
Monitor Current*, mA	I_m	0.05	0.3	1.0
Slope Efficiency, mW/mA	η	0.3	0.5	0.7
Beam Divergence, $^\circ$	$\theta_{//}$	8	10	12
Beam Divergence, $^\circ$	θ_{\perp}	25	30	40
Astigmatism**, μm	A_s		11	

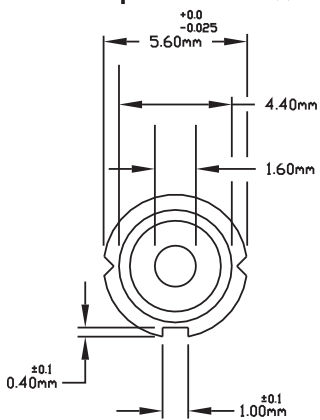
*) $V_R = 5 \text{ V}$

***) $NA = 0.4$

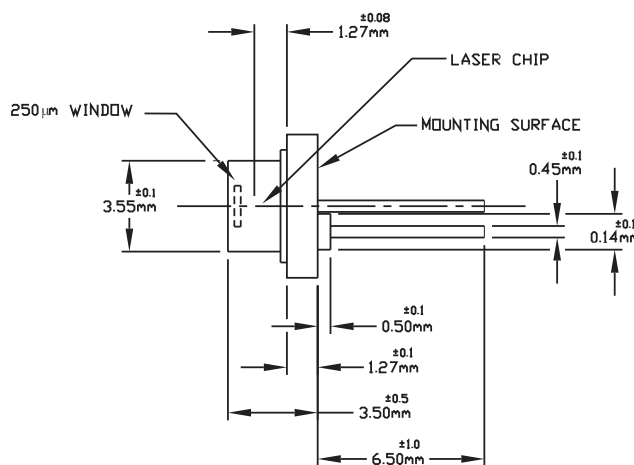
Drawings



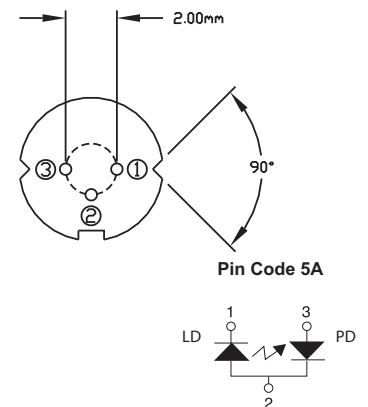
Top View



Side View



Bottom View



Pin Description

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

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