

Specifications of 850nm 5mW Laser Diode

Model No. LD-850-5A

Features

Index Guided MQW Structure

- Wavelength 850 nm (Typ.)
- 5mW CW Operation at -10 to +60 °C
- Low Threshold Current 10mA (Typ.)
- Standard package: TO-18 (Æ 5.6mm package)

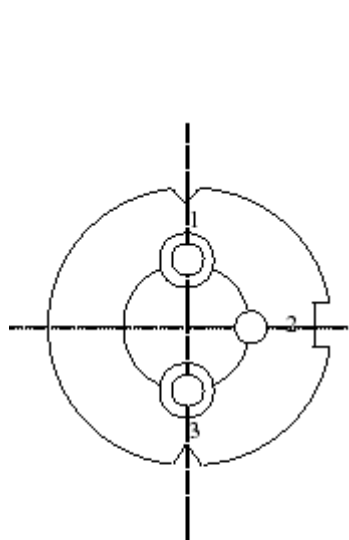
Absolute Maximum Ratings

PARAMETER	SYMBOL	RATINGS
Optical Output Power	P_0	7 mW
LD Reverse Voltage	V_{RL}	2 V
PD Reverse Voltage	V_{RD}	30 V
Operation Temperature	T_o	-10 to +60 °C
Storage Temperature	T_{STG}	-40 to +85°C

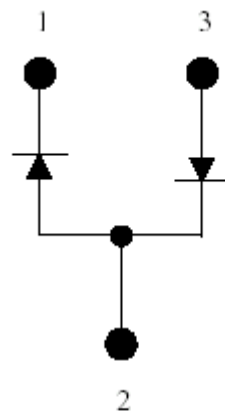
Electrical – Optical Characteristics

PARAMETER	SYMBOL	MIN.	TYP	MAX.	UNITS	TEST CONDITION
Lasing Wavelength	λ_p	845	850	855	nm	$P_0=5mW$
Threshold Current	I_{th}	5	10	20	mA	
Operation Current	I_{op}	15	20	30	mA	$P_0=5mW$
Operation Voltage	V_{op}	-	1.9	2.5	V	$P_0=5mW$
Monitor Current	I_m	0.2	0.4	0.6	mA	$P_0=5mW$
Slope Efficiency	η	0.4	0.5	0.9	mW/mA	$P_0=2-5mW$
Beam Divergence	$\Theta_{ }$	7	9	12	deg	$P_0=5mW$ (parallel)
Beam Divergence	Θ_{\perp}	25	32	40	deg	$P_0=5mW$ (perpendicular)
Astigmatism	A_s	-	-	15	mm	

Pin Configuration



Bottom View



1. Laser diode cathode
2. Laser diode anode
Photodiode cathode
3. Photodiode anode

*Case and Pin#2 are common.