D850-5I

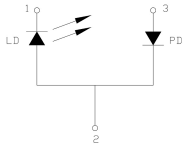
● 850nm 5mW 5.6mm laser diode ●

Product Description

D850-5I is an 850nm MOCVD grown laser diode with quantum well structures. This reliable 5mW IR is suitable for medical and measurement applications.

Features

- Device: 850nm IR laser diode
- Power: 5mW
- Package Type: TO-18 (5.6mmΦ)



▪ Absolute Maximum Rating (Tc=25°C)

Characteristics	Symbols	Rating	Unit
Optical power	Po	7	mW
Reverse Voltage (Laser)	V	2	V
Reverse Voltage (PIN)	V	30	V
Operating Temperature	Top	-10 to +60	°C
Storage Temperature	Tstg	-40 to +85	°C

▪ Electrical and Optical Characteristics (Tc=25°C)

Characteristics	Symbols	Min	Typ	Max.	Unit	Condition
Optical Power	Po	-	5	-	mW	-
Threshold Current	Ith	-	10	20	mA	Po=5mW
Operating Current	Iop	-	22	35	mA	Po=5mW
Operating Voltage	Vop	-	2.0	2.5	Volts	Po=5mW
Slope Efficiency	η	0.4	0.7	1.0	mW/mA	Po=2-5mW
Lasing Wavelength	λ	840	850	860	nm	Po=5mW
Beam Divergence	$\theta_{\parallel}$	7.0	8.5	12	deg	Po=5mW
	$\theta_{\perp}$	23	30	35	deg	Po=5mW
Beam Angle Deviation	$\theta_{\parallel}$	-3		3	deg	Po=5mW
	$\theta_{\perp}$	-3		3	deg	Po=5mW
Monitor Current	Im	-	0.2	0.70	mA	Po=5mW
Emission Point Accuracy	ΔX	-60	-	60	μm	
	ΔY	-60	-	60	μm	
	ΔZ	-60	-	60	μm	
Astigmatism	As	-	-	15	μm	

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