

Infrared Laser Diode

Part No: LD-808-5A-40-A-3-01



Features

- ※ Wavelength: $\lambda = 808\text{nm}$ (Type)
- ※ Output optical power: 500mW (CW)
- ※ Low operating Current: <550mA
- ※ Package: T0-5 ($\Phi 9\text{mm}$)

Applications

- ※ Industrial Use

Absolute Maximum Rating at $T_c=25^\circ\text{C}$

Items	Symbols	Values	Unit
Optical Output Power	P_o (CW)	500	mW
Laser Diode Reverse Voltage	V_r	2	V
Operating Temperature	T_{opr}	$-10 \sim +40$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +80$	$^\circ\text{C}$

Electrical and Optical Characteristics at $T_c=25^\circ\text{C}$

Items	Symbols	Min	Type	Max.	Unit	Condition
Optical Output Power	P_o	-	500	-	mW	CW
Threshold Current	I_{th}	-	50	70	mA	CW
Operating Current	I_{op}	-	500	550	mA	$P_o=400\text{mW}$
Slope Efficiency	η	0.8	1	-	mW/mA	$P_o=400\text{mW}$
Operating Voltage	V_{op}	-	1.8	2.1	V	$P_o=400\text{mW}$
Lasing Wavelength	λ	805	808	811	nm	$P_o=400\text{mW}$
Beam Divergence	//	9	12	15	$^\circ$	$P_o=400\text{mW}$
	\perp	28	30	35	$^\circ$	$P_o=400\text{mW}$
Beam Angle	$\Delta //$	-	-	± 3	$^\circ$	$P_o=400\text{mW}$
	$\Delta \perp$	-	-	± 3	$^\circ$	$P_o=400\text{mW}$
Emission Point Accuracy	$\Delta X, \Delta Y, \Delta Z$	-80	-	+80	μm	-

1) Measurement condition: CW

2) Full angle at half maximum.

3) All the above values are measured by OPELUS method.

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Package and Electrical connection

