

Infrared Laser Diode

Part No: LD-980-50-40-A-2



Features

- ※ Wavelength: $\lambda = 980\text{nm}$ (Type)
- ※ Low threshold current: $I_{th} = 20\text{mA}$ (Type)
- ※ Output optical power: 50mW (CW)
- ※ Package: T0-18 ($\Phi 5.6\text{mm}$)

Applications

- ※ Industrial Use

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

Items	Symbols	Values	Unit
Optical Output Power	P_o (CW)	50	mW
	V_r (LD)	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
Threshold Current	I_{th}	-	20	30	mA	CW
Operating Current	I_{op}	-	75	80	mA	$P_o = 50\text{mW}$
Operating Voltage	V_{op}	-	1.6	2.1	V	$P_o = 50\text{mW}$
Slope Efficiency	η	0.5	0.8	-	mW/mA	$P_o = 50\text{mW}$
Lasing Wavelength	λ	965	980	995	nm	$P_o = 50\text{mW}$
Beam Divergence	//	8	12	14	$^\circ$	$P_o = 50\text{mW}$
	\perp	30	35	40	$^\circ$	$P_o = 50\text{mW}$
Beam Angle	$\Delta //$	-	-	± 3	$^\circ$	$P_o = 50\text{mW}$
	$\Delta \perp$	-	-	± 3	$^\circ$	$P_o = 50\text{mW}$
Emission Point Accuracy	$\Delta X \Delta Y \Delta Z$	-80	-	80	μm	$P_o = 50\text{mW}$

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

