

Infrared Laser Diode

Part No: LD-780-60-70-P-2



Features

- ※ Wavelength: $\lambda = 785\text{nm}$ (Type)
- ※ Low threshold current: $I_{th} = 35\text{mA}$ (Type)
- ※ Output optical power: 50mW CW (120mW Pulsed)
- ※ 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	Po (CW)	50	mW
	Po (Pulse)	120	mW
Laser Diode Reverse Voltage	Vr	2	V
Photo Diode Reverse Voltage	Vr (PIN)	30	V
Operating Temperature	Topr	$-10 \sim +60$	$^\circ\text{C}$
Storage Temperature	Tstg	$-40 \sim +80$	$^\circ\text{C}$

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

Items	Symbols	Min	Type	Max.	Unit	Condition
Optical Output Power	Po	-	50	60	mW	CW
Threshold Current	Ith	-	35	60	mA	CW
Operating Current	Iop	-	85	100	mA	Po=50mW
Operating Voltage	Vop	-	1.9	2.1	V	Po=50mW
Slope Efficiency	η	-	1	1.2	mW/mA	CW
Lasing Wavelength	λ	775	785	795	nm	Po=50mW
Emission Point Accuracy	$\Delta X \Delta Y \Delta Z$	-80	-	80	μm	Po=50mW
Beam Divergence	//	8	9	10	$^\circ$	Po=50mW
	\perp	15	17	19	$^\circ$	Po=50mW
Beam Angle	$\Delta //$	-	-	± 2	$^\circ$	Po=50mW
	$\Delta \perp$	-	-	± 2	$^\circ$	Po=50mW

- 1) Measurement condition: CW
- 2) Full angle at half maximum.
- 3) All the above values are measured by OPELUS method.
- 4) Im was selected based on customer requirements.

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Package and Electrical connection

