

# 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: 60mW (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	Po (CW)	60	mW
	Po (Pulse)	100	mW
Laser Diode Reverse Voltage	Vr	2	V
Photo Diode Reverse Voltage	Vr (PIN)	30	V
Operating Temperature	Topr	$-10 \sim +70$	$^\circ\text{C}$
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	-	60	-	mW	CW
Threshold Current	Ith	25	35	45	mA	CW
Operating Current	Iop	70	85	100	mA	Po=60mW
Operating Voltage	Vop	1.5	2	2.2	V	Po=60mW
Slope Efficiency	$\eta$	0.8	1.1	1.3	mW/mA	CW
Monitor Current	Im	0.1	0.5	0.7	mA	Po=60mW
Lasing Wavelength	$\lambda$	775	785	795	nm	Po=60mW
Emission Point Accuracy	$\Delta X \Delta Y \Delta Z$	-80	-	80	$\mu\text{m}$	Po=60mW
Beam Divergence	//	8	9	10	$^\circ$	Po=60mW
	$\perp$	15	17	19	$^\circ$	Po=60mW
Beam Angle	$\Delta //$	-	-	$\pm 2$	$^\circ$	Po=60mW
	$\Delta \perp$	-	-	$\pm 3$	$^\circ$	Po=60mW

- 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

