

Red Laser Diode

Part No: LD-658-1A-60-P-2



Features

- ※ Wavelength: $\lambda = 658\text{nm}$ (Type)
- ※ Threshold current: $I_{th} = 55\text{mA}$ (Type)
- ※ Output optical power: 100mW (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)	110	mW
Laser Diode Reverse Voltage	V_r	2	V
Photo Diode Reverse Voltage	V_r (PIN)	30	V
Operating Temperature	T_{opr}	$-10 \sim +60$	$^\circ\text{C}$
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	-	110	100	mW	CW
Threshold Current	I_{th}	-	55	65	mA	CW
Operating Current	I_{op}	-	155	165	mA	$P_o = 100\text{mW}$
Operating Voltage	V_{op}	-	2.5	2.8	V	$P_o = 100\text{mW}$
Slope Efficiency	η	0.8	1	1.2	mW/mA	CW
Monitor Current	I_m	0.1	0.4	0.8	mA	$P_o = 100\text{mW}$
Lasing Wavelength	λ	650	658	665	nm	$P_o = 100\text{mW}$
Emission Point Accuracy	$\Delta X \Delta Y \Delta Z$	-80	-	80	μm	$P_o = 100\text{mW}$
Beam Divergence	//	7	9	10	$^\circ$	$P_o = 100\text{mW}$
	\perp	15	19	22	$^\circ$	$P_o = 100\text{mW}$
Beam Angle	$\Delta //$	-	-	± 3	$^\circ$	$P_o = 100\text{mW}$
	$\Delta \perp$	-	-	± 3	$^\circ$	$P_o = 100\text{mW}$

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

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Package and Electrical connection

