

RED LASER DIODE

DL-LS1030

Tentative

Ver.1 Apr. 2002

Features

- Short wavelength : 635 nm (Typ.)
- High output power : 5 mW at 60°C
- Low threshold current : $I_{th} = 25$ mA (Typ.)

Applications

- Bar-code scanner
- Industrial equipment

Absolute Maximum Ratings

($T_c=25^\circ\text{C}$)

Parameter		Symbol	Rating	Unit
Light Output	CW	P_o	7	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature		T_{opr}	-10 to +60	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 to +85	$^\circ\text{C}$

Electrical and Optical Characteristics ^{1) 2)}

($T_c=25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	CW	-	25	40	mA
Operating Current	I_{op}	$P_o=5\text{mW}$	-	30	50	mA
Operating Voltage	V_{op}	$P_o=5\text{mW}$	-	2.2	2.6	V
Lasing Wavelength	L_p	$P_o=5\text{mW}$	-	635	640	nm
Beam ³⁾ Divergence	Perpendicular	Q_v	25	30	35	$^\circ$
	Parallel	Q_h	7	9	11	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	-	-	± 3	$^\circ$
	Parallel	dQ_h	-	-	± 3	$^\circ$
Differential Efficiency	dP_o/dI_{op}	-	-	0.6	-	mW/mA
Monitoring Output Current	I_m	$P_o=5\text{mW}$	0.08	0.12	0.4	mA
Astigmatism	A_s	$P_o=5\text{mW}$	-	8	-	μm

1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus

3) Full angle at half maximum

Note : The above product specification are subject to change without notice.

