

# RED LASER DIODE

## DL-LS1030

Tentative

# SANYO

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	°C
Storage Temperature		$T_{stg}$	-40 to +85	°C

### Electrical and Optical Characteristics <sup>1) 2)</sup>

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

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 <sup>3)</sup> Divergence	Perpendicular	$Q_v$	25	30	35	°
	Parallel	$Q_h$	7	9	11	°
Off Axis Angle	Perpendicular	$dQ_v$	-	-	$\pm 3$	°
	Parallel	$dQ_h$	-	-	$\pm 3$	°
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	-	$\mu\text{m}$

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.

