

# RED LASER DIODE

## DL-LS1061

Tentative

**SANYO**

Ver.1 Mar. 2002

### Features

- wavelength : 658 nm (Typ.)
- High output power : 100 mW at 70°C (pulse)
- Low threshold current :  $I_{th} = 35$  mA (Typ.)
- Small package : Ø5.6 mm
- TE mode

### Applications

- DVD-R/±RW/RAM

### Absolute Maximum Ratings

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

Parameter	Symbol	Ratings	Unit
Light Output	CW	$P_o$ (CW)	60
	Pulse <sup>1)</sup>	$P_o$ (pulse)	100
Reverse Voltage	Laser	$V_R$	V
Operating Temperature	$T_{opr}$	-10 to +70	°C
Storage Temperature	$T_{stg}$	-40 to +85	°C

1) Pulse Width 0.1μs, Duty 50%

### Electrical and Optical Characteristics

<sup>2) 3)</sup>

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	$I_{th}$	CW	-	35	60	mA
Operating Current	$I_{op}$	$P_o=50\text{mW}$	-	80	115	mA
Operating Voltage	$V_{op}$	$P_o=50\text{mW}$	-	2.7	3.0	V
Lasing Wavelength	$\lambda_p$	$P_o=50\text{mW}$	-	658	662	nm
Beam <sup>4)</sup> Divergence	Perpendicular	$Q_v$	$P_o=50\text{mW}$	15	17	°
	Parallel	$Q_h$	$P_o=50\text{mW}$	8	9	°
Off Axis Angle	Perpendicular	$dQ_v$	-	-	$\pm 2$	°
	Parallel	$dQ_h$	-	-	$\pm 2$	°
Differential Efficiency	$dP_o/dI_{op}$	-	-	1.1	-	mW/mA
Astigmatism	$A_s$	$P_o=50\text{mW}$	-	1	-	μm

2) Initial values 3) All the above values are evaluated with Tottori Sanyo's measuring apparatus

4) Full angle at half maximum

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

Tottori SANYO Electric Co., Ltd.  
LED Division

5-318, Tachikawa, Tottori 680-8634 Japan

Electronic Device Business Headquarters

TEL : +81-857-21-2137 FAX : +81-857-21-2161