

RED LASER DIODE

DL-LS1045

Tentative

SANYO

Ver.3 Oct. 2001

Features

- wavelength : 658 nm (Typ.)
- High output power :80 mW at 70°C (pulse)
- Low threshold current : I_{th} = 35 mA (Typ.)
- Small package : ϕ 5.6 mm
- TE mode

Applications

- DVD-R/RW

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o (CW)	50	mW
	Pulse ¹⁾	P _o (pulse)	80	
Reverse Voltage	Laser	V _R	2	V
Operating Temperature		T _{opr}	-10 to +70	°C
Storage Temperature		T _{stg}	-40 to +85	°C

1) Pulse Width 0.1 μ s, Duty 50%

Electrical and Optical Characteristics^{2) 3)}

(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	35	60	mA
Operating Current		I _{op}	P _o =50mW	-	80	110	mA
Operating Voltage		V _{op}	P _o =50mW	-	2.7	3.0	V
Lasing Wavelength		L _p	P _o =50mW	-	658	664	nm
Beam ⁴⁾ Divergence	Perpendicular	Q _v	P _o =50mW	15	17	20	°
	Parallel	Q _h	P _o =50mW	7	9.5	12	°
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 =50mW	-	2	-	μ m

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

