

# RED LASER DIODE

## DL-LS1198

Tentative

**SANYO**

Ver.1 Mar. 2008

### Features

- Wavelength : 635nm(Typ.)
- **Output power : 10mW**
- Threshold current :  $I_{th}=22\text{mA}$ (Typ.)
- Operating voltage :  $V_{op}=2.3\text{V}$ (Typ.)
- Package :  $\phi 5.6\text{mm}$
- TE mode

### Applications

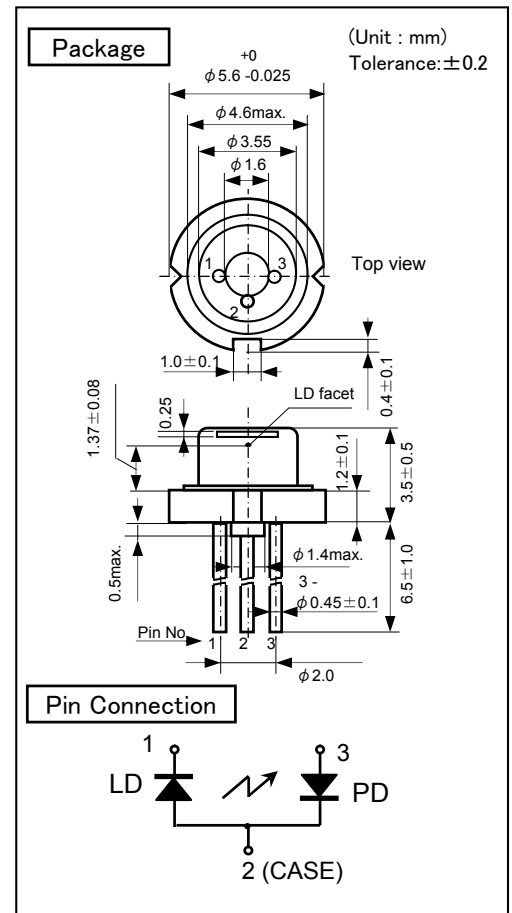
- Laser module

### Absolute Maximum Ratings

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

Parameter	Symbol	Rated	Unit
Light Output CW	$P_o(\text{CW})$	12	mW
Reverse Voltage (LD)	VR	2	V
Operating Temperature <sup>1)</sup>	$T_{op}$	-10 to +40	$^\circ\text{C}$
Storage Temperature <sup>1)</sup>	$T_{stg}$	-40 ~ +85	$^\circ\text{C}$

1) Case temperature.



### Electrical and Optical Characteristics <sup>2) 3) 4) 5)</sup>

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	$I_{th}$	CW	-	22	30	mA
Operating Current	$I_{op}$	$P_o=10\text{mW}$	-	35	50	mA
Operating Voltage	$V_{op}$	$P_o=10\text{mW}$	-	2.3	2.6	V
Lasing Wavelength	$\lambda_p$	$P_o=10\text{mW}$	-	635	640	nm
Beam <sup>6)</sup> Divergence	Perpendicular	$Q_v$	-	20	-	$^\circ$
	Parallel	$Q_h$	-	7.5	-	$^\circ$
Off Axis Angle	Perpendicular	$dQ_v$	-3	-	3	$^\circ$
	Parallel	$dQ_h$	-3	-	3	$^\circ$
Differential Efficiency	SE	$P_o=10\text{mW}$	-	0.75	-	mW/mA
Monitoring Output Current	$I_m$	$P_o=10\text{mW}$	-	0.5	-	mA

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

4) It makes a typical value a Reference Value. 5) Measurement condition : CW. 6) Full angle at half maximum.

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

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