

INFRARED LASER DIODE

DL-3144-007S

SANYO

Ver.1 May. 2001

Features

- Wavelength : 785 nm (Typ.)
- Low threshold current : $I_{th} = 25$ mA (Typ.)
- Small package : $\phi 5.6$ mm

Applications

Laser beam printer

Absolute Maximum Ratings

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

Parameter		Symbol	Ratings	Unit
Light Output		P_o (CW)	5	mW
Reverse Voltage	Laser	VR	2	V
	PIN		30	
Operating Temperature ¹⁾		T_{opr}	-10 ~ +60	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 ~ +85	$^\circ\text{C}$

1) Case temperature

Electrical and Optical Characteristics 2) 3) 4) 6)

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

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I_{th}	CW	15	25	35	mA
Operating Current		I_{op}	$P_o = 3\text{mW}$	-	35	45	mA
Lasing Wavelength		L_p	$P_o = 3\text{mW}$	770	785	800	nm
Beam ⁵⁾ Divergence	Perpendicular	Q_v	$P_o = 3\text{mW}$	20	27	30	$^\circ$
	Parallel	Q_h	$P_o = 3\text{mW}$	7	9	12	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	$P_o = 3\text{mW}$	-	-	± 3	$^\circ$
	Parallel	dQ_h	$P_o = 3\text{mW}$	-	-	± 2	$^\circ$
Differential Efficiency		dP_o/dI_{op}	-	0.15	0.35	0.5	mW/mA
Monitoring Output Current		I_m	$P_o = 3\text{mW}$	0.3	0.6	1.5	mA
Astigmatism		A_s	$P_o = 3\text{mW}$	-	-	10	μm

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

4) Reference values. 5) Full angle at half maximum. 6) Measured at CW.

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

