

**DL-3144-007S****Infrared Laser Diode****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 at $T_c=25^\circ\text{C}$

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

1) Case temperature

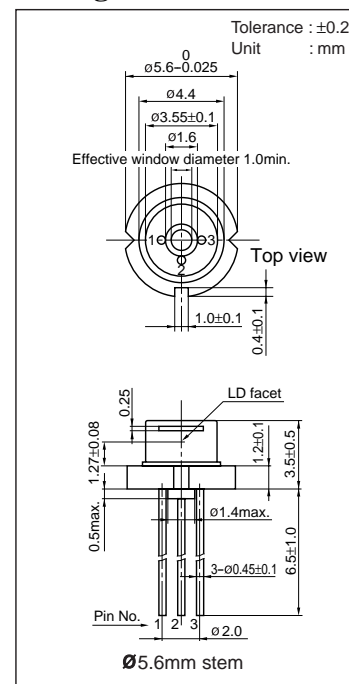
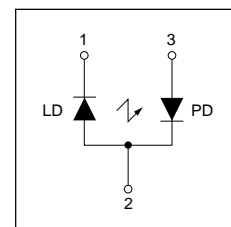
Electrical and Optical Characteristics 2) 3) 4) 6) at $T_c=25^\circ\text{C}$

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		λ_p	$P_o=3\text{mW}$	770	785	800	nm
Beam 5)	Perpendicular	$\theta \perp$	$P_o=3\text{mW}$	20	27	30	$^\circ$
	Parallel	$\theta //$	$P_o=3\text{mW}$	7	9	12	$^\circ$
Off Axis Angle	Perpendicular	$\Delta \theta \perp$	$P_o=3\text{mW}$	-	-	± 3	$^\circ$
	Parallel	$\Delta \theta //$	$P_o=3\text{mW}$	-	-	± 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.

Package Dimensions**Pin Connection**



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Precautionary instructions in handling gallium arsenic products

Special precautions must be taken in handling this product because it contains, gallium arsenic, which is designated as a toxic substance by law. Be sure to adhere strictly to all applicable laws and regulations enacted for this substance, particularly when it comes to disposal.

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