



DL-3144-007S

Infrared Laser Diode

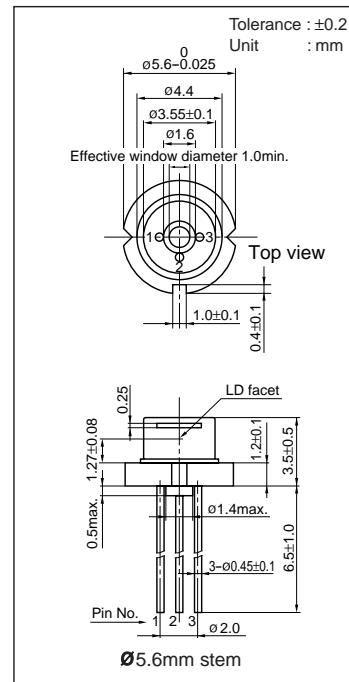
Features

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

Applications

- Laser beam printer

Package Dimensions

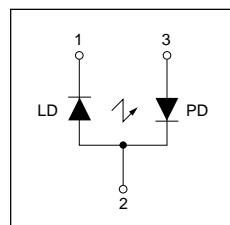


Absolute Maximum Ratings at $T_c=25^\circ\text{C}$

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

1) Case temperature

Pin Connection



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 Divergence 5)	Perpendicular	θ_{\perp}	$P_o=3\text{mW}$	20	27	30
	Parallel	θ_{\parallel}	$P_o=3\text{mW}$	7	9	12
Off Axis Angle	Perpendicular	$\Delta\theta_{\perp}$	$P_o=3\text{mW}$	-	± 3	°
	Parallel	$\Delta\theta_{\parallel}$	$P_o=3\text{mW}$	-	± 2	°
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.

 **CAUTION**

1. No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster / crime-prevention equipment or the like, and the failure of which may directly or indirectly cause injury, death or property loss.
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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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