

**DL-4034-154S****Infrared Laser Diode****Features**

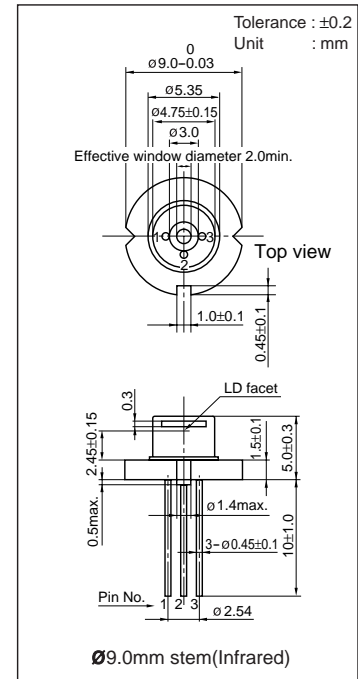
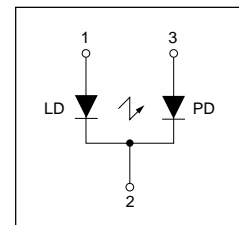
- Wavelength : 785 nm (Typ.)
- Low threshold current : $I_{th} = 30$ mA (Typ.)
- Low droop : less than 10%

Applications

- Laser printer

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

Parameter		Symbol	Ratings	Unit
Light Output	CW	P_o	15	mW
Reverse Voltage	Laser	V_R	2	V
	PD		30	
Operating Temperature		T_{opr}	-10 to +60	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 to +85	$^\circ\text{C}$

Package Dimensions**Pin Connection****Electrical and Optical Characteristics 1) at $T_c=25^\circ\text{C}$**

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I_{th}	CW	20	30	40	mA
Operating Current		I_{op}	$P_o=10\text{mW}$	-	60	80	mA
Lasing Wavelength		λ_p	$P_o=10\text{mW}$	770	785	800	nm
Beam 2) Divergence	Perpendicular	θ_{\perp}	$P_o=10\text{mW}$	20	28	35	$^\circ$
	Parallel	$\theta_{//}$	$P_o=10\text{mW}$	7	9	11	$^\circ$
Off Axis Angle	Perpendicular	$\Delta\theta_{\perp}$	$P_o=10\text{mW}$	-	-	± 3	$^\circ$
	Parallel	$\Delta\theta_{//}$	$P_o=10\text{mW}$	-	-	± 3	$^\circ$
Differential Efficiency		dP_o/dI_{op}	-	0.25	0.35	0.45	mW/mA
Monitoring Output Current		I_m	$P_o=10\text{mW}$	0.2	0.4	1.0	mA
Astigmatism		A_s	$P_o=10\text{mW}$	-	-	10	μm
Droop 3)		Δp	$P_o=10\text{mW}$	-	-	10	%

1) Initial values 2) Full angle at half maximum 3) $f=600$ Hz, duty 10% - 90%

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

SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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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.

Manufactured by ; **Tottori SANYO Electric Co., Ltd.**
LED Business Unit
5-318, Tachikawa-cho, Tottori City, 680-8634 Japan
TEL: +81-857-21-2137 FAX: +81-857-21-2161