

**DL-8032-001****Infrared Laser Diode****Features**

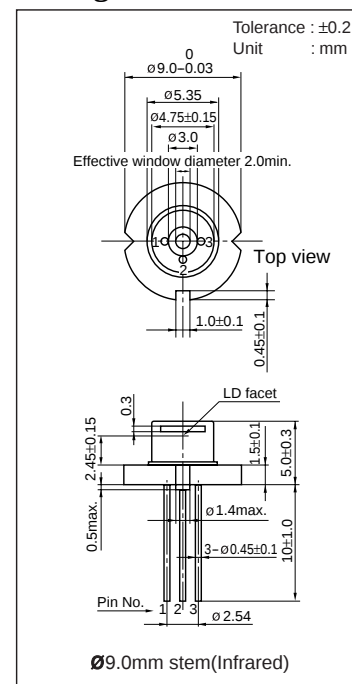
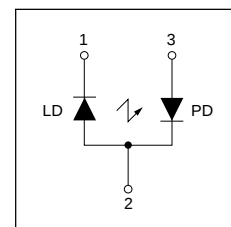
- Lasing wavelength : 830 nm (Typ.)
- High output power : 150 mW at 50°C
- Low threshold current : I_{th} = 50 mA (Typ.)

Applications

- Laser beam printer

Absolute Maximum Ratings at T_c=25°C

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o	150	mW
Reverse Voltage	Laser	V _R	2	V
	PD		30	
Operating Temperature		T _{opr}	-10 to +50	°C
Storage Temperature		T _{stg}	-40 to +85	°C

Package Dimensions**Pin Connection****Electrical and Optical Characteristics at T_c=25°C**

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	50	70	mA
Operating Current		I _{op}	P _o =150mW	-	185	220	mA
Operating Voltage		V _{op}	P _o =150mW	-	1.8	2.2	V
Lasing Wavelength		λ _p	P _o =150mW	815	830	840	nm
Beam 1) Divergence	Perpendicular	θ _⊥	P _o =150mW	12	18	25	°
	Parallel	θ _∥	P _o =150mW	5	7	11	°
Off Axis Angle	Perpendicular	Δθ _⊥	-	-	-	±3	°
	Parallel	Δθ _∥	-	-	-	±3	°
Differential Efficiency		dP _o /dI _{op}	-	0.7	1.0	-	mW/mA
Monitoring Output Current		I _m	P _o =150mW	0.15	0.5	2.0	mA
Astigmatism		A _s	P _o =150mW	-	-	10	μm

1) Full angle at half maximum

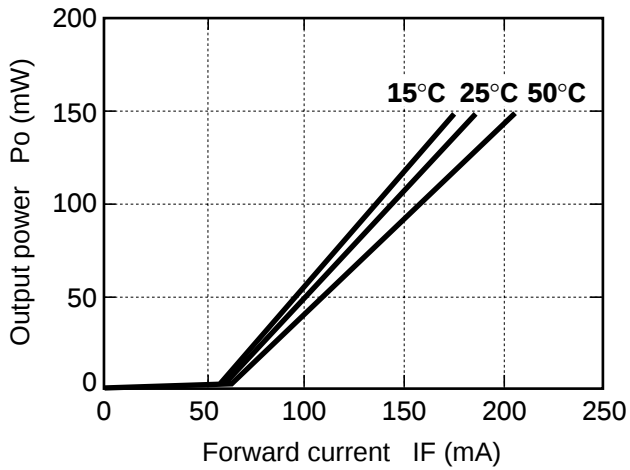
Note : The above product specification are subject to change without notice.

SANYO Electric Co.,Ltd. Semiconductor Company

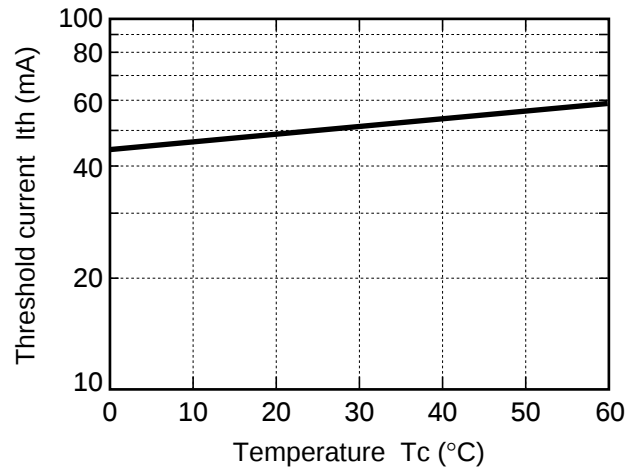
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Characteristics

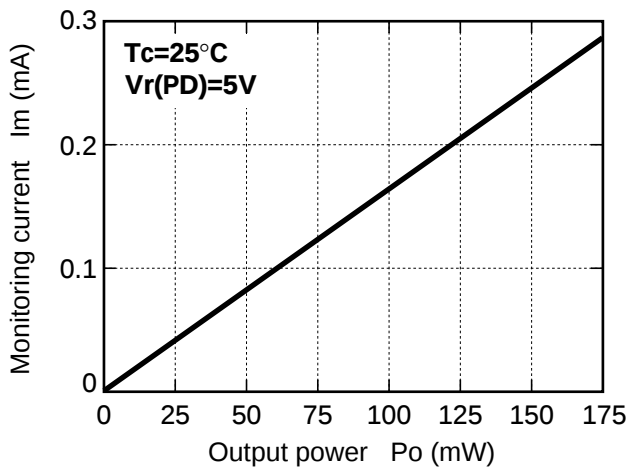
Output power vs. Forward current



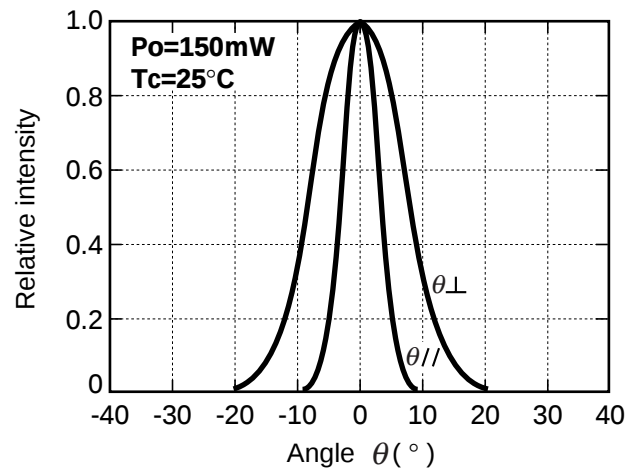
Threshold current vs. Temperature



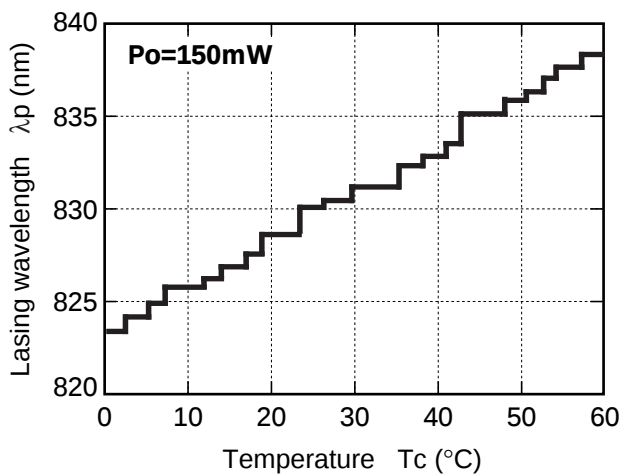
Monitoring current vs. Output power



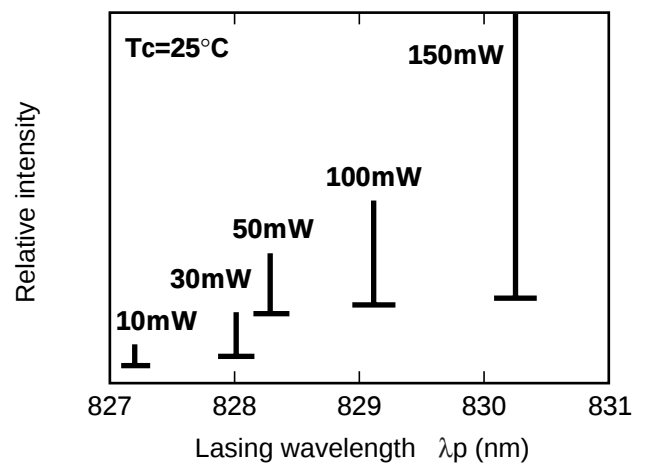
Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power





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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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