INFRARED LASER DIODE

DL-3144-008S

Ver.1.1 Oct. 2001

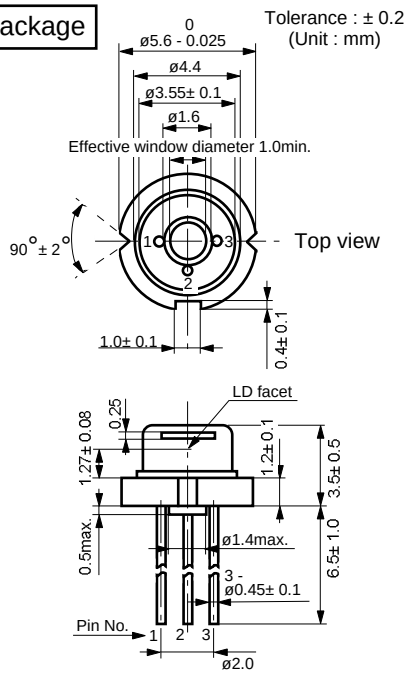
Features

- Wavelength : 785 nm (Typ.)
- Low threshold current : Ith = 25 mA (Typ.)
- Small package : ø5.6mm
- Low droop : less than 10%

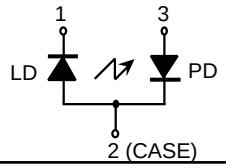
Applications

Laser beam printer

Package



Pin Connection



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output		Po (CW)	8	mW
Reverse Voltage	Laser	VR	2	V
	PIN		30	
Operating Temperature 1)		Topr	-10 to +60	°C
Storage Temperature		Tstg	-40 to +85	°C

1) Case temperature

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

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	15	25	40	mA
Operating Current		Iop	Po=5mW	-	40	55	mA
Lasing Wavelength		Lp	Po=5mW	770	785	800	nm
Beam Divergence 5)	Perpendicular	Qv	Po=5mW	20	25	30	°
	Parallel	Qh	Po=5mW	7	8.5	11	°
Off Axis Angle	Perpendicular	dQv	Po=5mW	-	-	± 3	°
	Parallel	dQh	Po=5mW	-	-	± 2	°
Differential Efficiency		dPo/dIop	-	0.2	0.35	0.55	mW/mA
Monitoring Output Current		Im	Po=5mW	1.0	2.0	3.5	mA
Astigmatism		As	Po=5mW	-	-	10	µm
Droop 7)		dp	Po=5mW	-	-	10	%

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 7) f=600Hz,duty 10%-90%.

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

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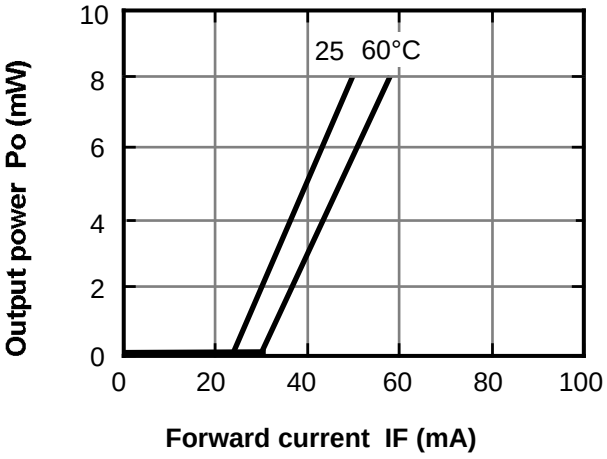
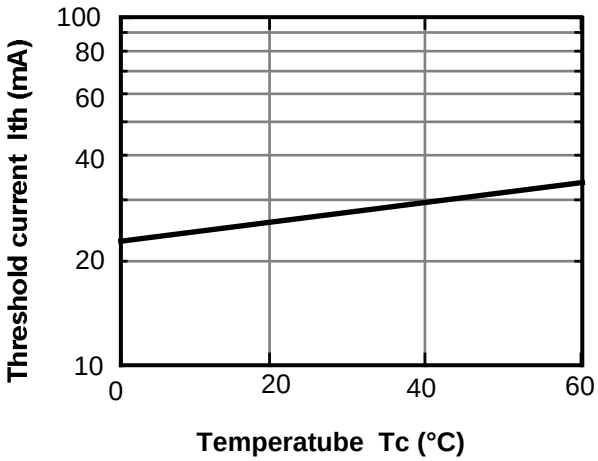
Characteristics

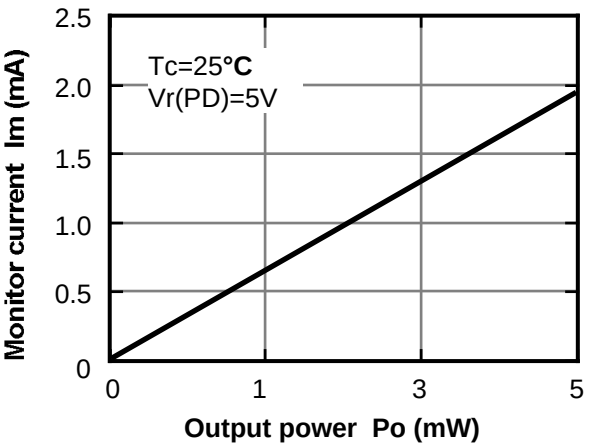
Output power vs. Forward current



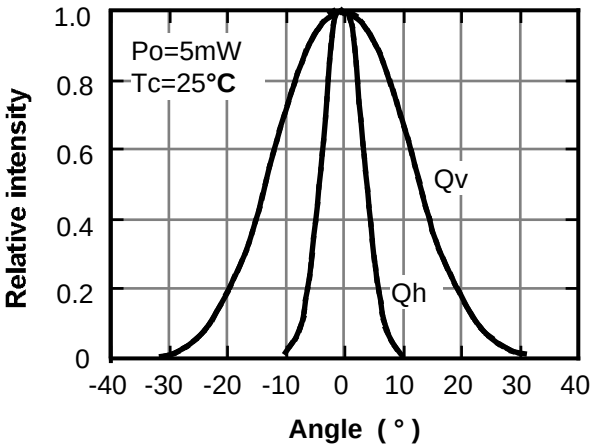
Threshold current vs. Temperature



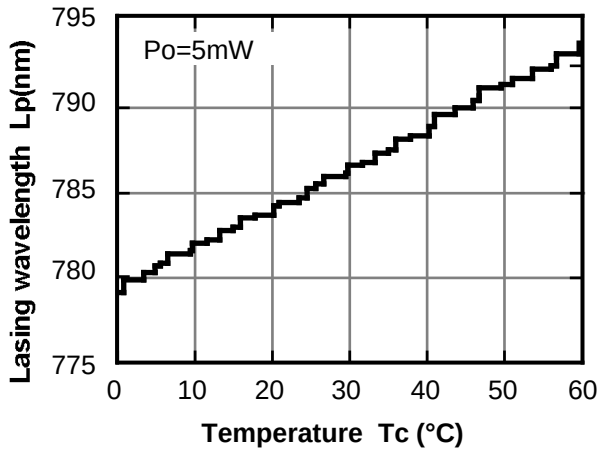
Monitor current vs. Output power



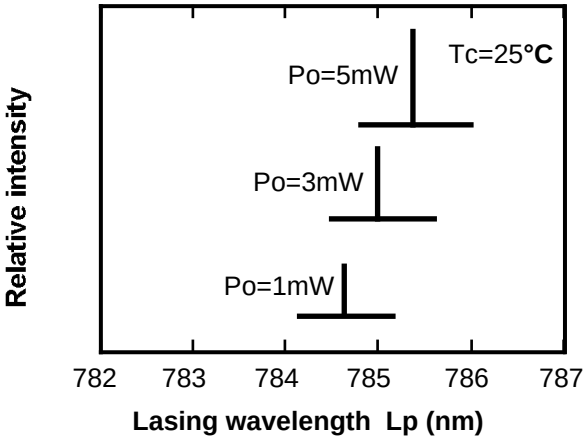
Beam divergence



Lasing wavelength vs. Temperature



Output power vs. Lasing wavelength



This is typical data and it may not represent all products.