RED LASER DIODE

DL-4039-011

SANYO

Ver.4 Apr. 1999

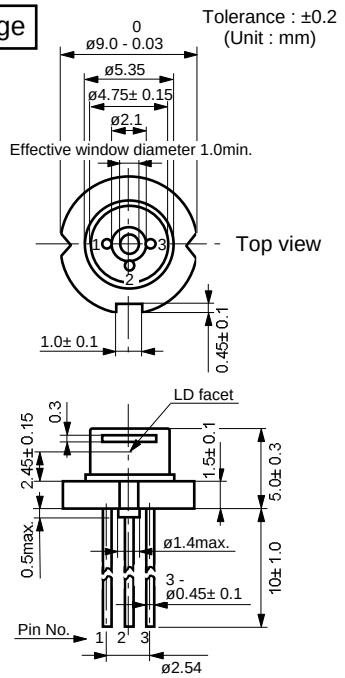
Features

- Short wavelength : 675 nm (Typ.)
- High output power : 10 mW at 50°C
- Low threshold current : Ith = 40 mA (Typ.)

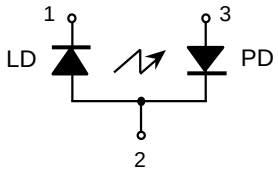
Applications

- Bar-code scanner
- Laser beam printer

Package



Pin Connection



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po	10	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature		Topr	-10 ~ +50	°C
Storage Temperature		Tstg	-40 ~ +85	°C

Electrical and Optical Characteristics [1) 2)]

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	-	40	70	mA
Operating Current		Iop	Po=10mW	-	60	90	mA
Operating Voltage		Vop	Po=10mW	-	2.3	2.6	V
Lasing Wavelength		Wp	Po=10mW	665	675	685	nm
Beam Divergence [3)]	Perpendicular	Qv	Po=10mW	25	30	40	°
	Parallel	Qh	Po=10mW	6	8	10	°
Off Axis Angle	Perpendicular	dQv	-	-	-	±3	°
	Parallel	dQh	-	-	-	±3	°
Differential Efficiency		dPo/dIop	-	0.2	0.5	-	mW/mA
Monitoring Output Current		Im	Po=10mW	0.05	0.15	0.4	mA
Astigmatism		As	Po=10mW	-	8	-	µm

1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus

3) Full angle at half maximum

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

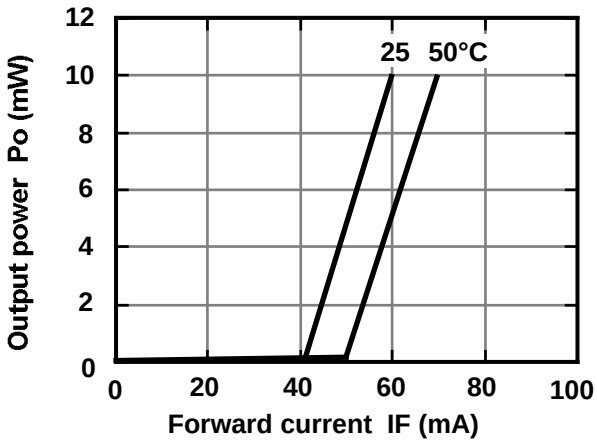
Tottori SANYO Electric Co., Ltd. Electronic Device Business Headquarters

LED Division

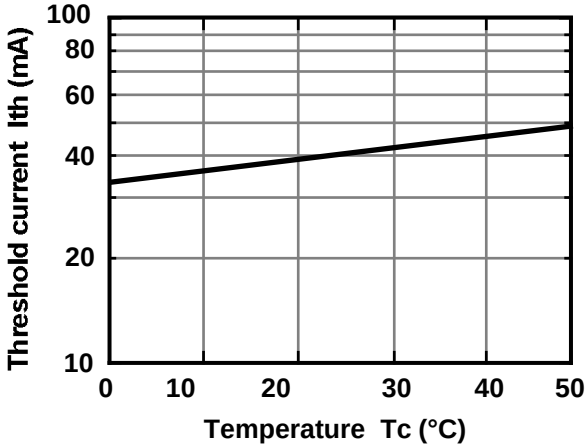
5-318, Tachikawa, Tottori 680-8634 Japan TEL : +81-857-21-2137 FAX : +81-857-21-2161

Characteristics

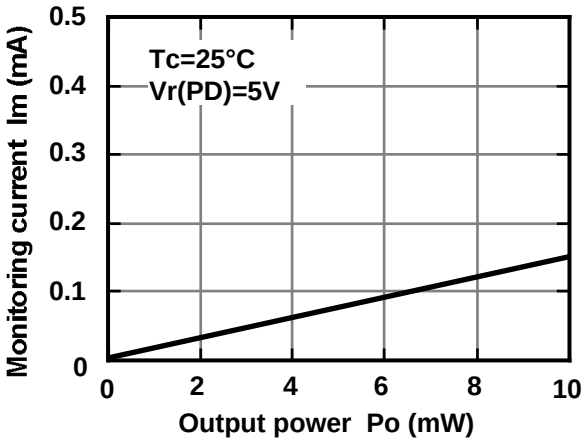
Output power vs. Forward current



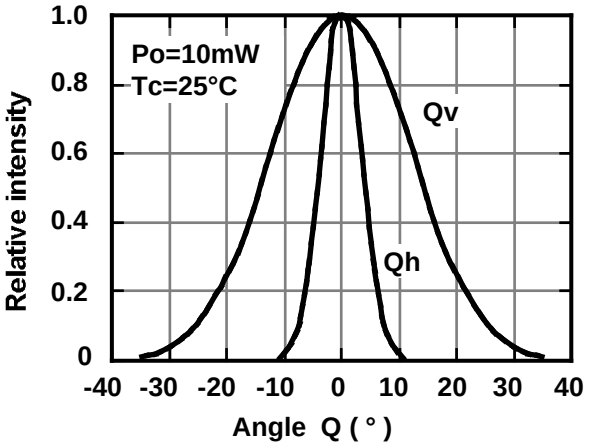
Threshold current vs. Temperature



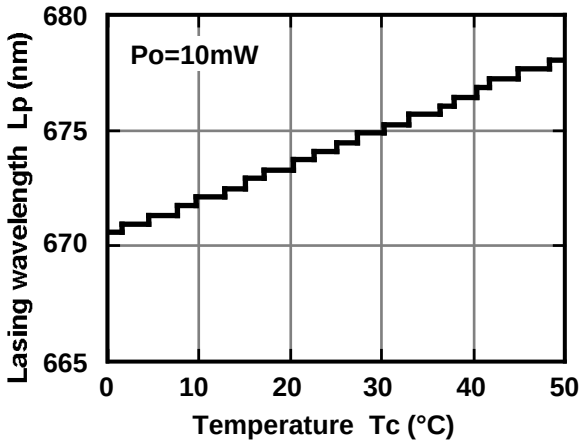
Monitoring current vs. Output power



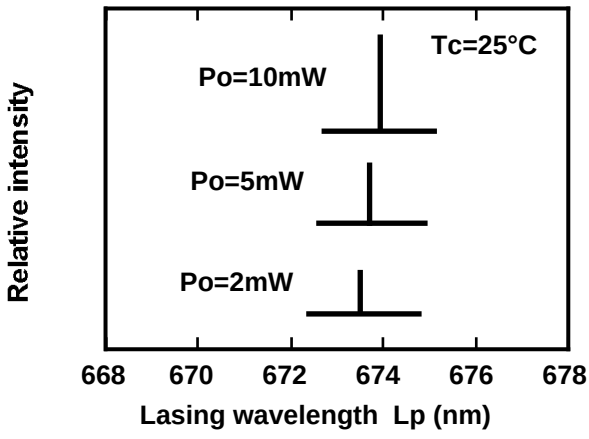
Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power



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